



HELM PRESSES

And the
Dry
Wall
Building
System



Concrete
Blocks
and
Bricks

Helm Brick Machine Company
TRAVERSE CITY, MICH., U. S. A.



Foreword

OUR sole aim in preparing this catalog which we now place before you has been to truthfully illustrate and describe our Helm Presses for the manufacture of pressed cement brick and building blocks and the Helm DRY WALL system. Every claim made is backed up by our guarantee and the testimonials of owners of Helm Presses. You will be helped in considering Helm Presses and the DRY WALL building system by the following suggestions:

THE FIELD is made clear to you in pages 1 and 2.

HELM DRY WALL SYSTEM is fully illustrated and explained on pages 3 to 8.

THE PROFITS OF CONCRETE AND GENERAL INFORMATION you will find on pages 9 to 12.

THE ESSENTIALS IN BUYING A MACHINE are fully explained on pages 12 and 13.

OUR TWO MODELS OF HELM PRESSES—No. 5 and No. 8— either for hand or power operation, for making brick only, blocks only or brick and blocks combined, illustrated and described by pages 14 to 29.

OUR PRICES FOR HELM EQUIPMENT are plainly printed with each machine throughout the catalog. We are a one price house. These printed prices are rock bottom and only subject to the cash discount quoted in our order plan on page 3 of cover.

MIXERS, HAND MOULDS AND TRUCKS illustrated and described on pages 30 to 33.

TESTIMONIALS FROM HELM PRESS USERS, fully substantiating and even exceeding our claims, are quoted on pages 34 to 44.

WHEN YOU BUY HELM MACHINERY you take no chance. Everything is done by this company to make the purchaser absolutely safe. You will be protected for one year from the time you receive the machinery by the liberal guarantee which follows:

Certificate of Guarantee

This is to Certify that any Concrete Machine listed in this catalog is guaranteed to be perfect in material and workmanship, to be just as represented, to work perfectly and have the capacity claimed when worked properly and in accordance with directions. For 365 days from date of shipment, we agree to replace FREE of charge at the factory any parts that prove defective through fault of material or workmanship.

We guarantee safe delivery of all shipments. In case a machine is damaged you are to have the freight agent carefully note the damage on the freight bill. Send it to us with order for the necessary repairs and we will furnish them FREE of charge.

HELM BRICK MACHINE COMPANY,
Traverse City, Mich.

The Greatest Opportunity in America Today

Concrete is the coming world's greatest industry.

There is every reason why the concrete industry should be the world's leading industry.

It should even outstrip the iron and steel industry.

Men of brains are turning to it with a feeling of certainty that the highest success will be theirs—financial success—independence and everything that goes with these hard won positions.

For the time is not far distant when every building—no matter whether sky scraper or dwelling—must depend in some degree upon concrete and the concrete industry.

The forests are going. Indeed, they have almost disappeared.

What shall take the place of wood?

The answer is: "CONCRETE."

And the man who gets into the business on the ground floor is the man who will be ready to take care of the big rush of business which is soon to begin.

Indeed, this great rush already has started.

Millions already have been made out of this industry.

And millions more are being made every year.

The man who has not yet started should lose no time.

The man who has started should select the best machines that are to be found any place.

And the best machine for the man who has started and for the man who has not started is the **Helm Press**.

In the pages that follow we attempt to show you first that you should get into the concrete industry, if you are not in it already, whether on a big scale or on a small scale.

Then we attempt to prove to you that when you do get into the concrete industry or when you enlarge your present business, if you are a part of the industry already, you should buy the Helm Concrete machinery.

No matter how small the scale on which you might have to start. There is such a field ahead of you that even the greatest brain cannot conceive half of its magnitude.

The greatest inventor that ever lived—Thomas A. Edison, the "Wizard of the Twentieth Century"—has said that if he were not too busy with his electrical apparatus he would go into the concrete business.

Edison was one of the first men to see a great future in the electrical business.

Now he sees a great future in the concrete business.

Mr. Edison went into the electrical business, and he is many times a millionaire.

Those who followed him also are millionaires.

At that time the concrete business was not thought of. It was not thought of because there was no need for concrete. The forests were still seemingly inexhaustible.

There was no more demand for concrete then than there was for electrical apparatus a hundred or so years before Edison's time.

But the concrete age has come. Hundreds of men have looked a few years ahead and they have seen riches.

Many others are looking ahead every day and they, too, are starting on the concrete road that cannot help but lead to success.

We want you to make a start today if you have not started already.

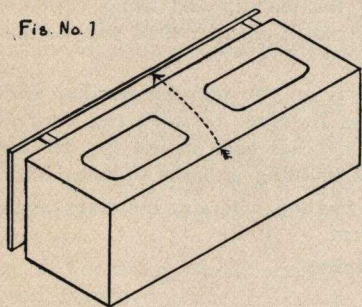
We are sending out this catalog to influence you to start. Or if you have started we want to convince you that if you have not yet installed the Helm Machinery you should do so.

And in the pages that are to follow we will show you WHY.

Wherever the Cement Bond Goes Through, Moisture is Bound to Follow

You will see by this illustration of the ordinary hollow block that a solid cement bond runs from surface to surface.

Fig. No. 1



We want you to see how inferior it is to the block made by the Helm Press.

It is more expensive, too.

The arrow shows where moisture and frost get through.

The moisture follows the solid bond which connects the outer and inner shells.

Capillary attraction causes it the same as it does in clay brick or stone walls. The only way to make this block wall dry is to furr and lath it as illustrated. This creates a true air space.

The furring, lathing and rough coat of plaster for the surface of this block, size 8x24, will cost 4 cents. This amount is wasted every time one of these blocks goes into the building. Just a moderate size building requiring 2,000 such blocks means a needless expense of \$80.

Furring and lathing will convert such a building into a fire trap.

Helm Press DRY WALL products save this needless expense and make dry, sanitary, fireproof buildings.

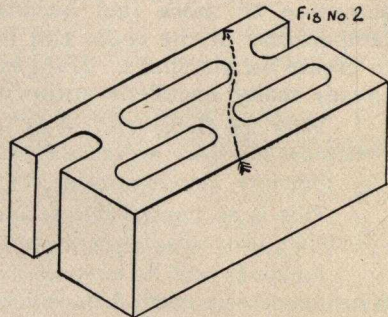
Capillary Attraction Draws Moisture in any Direction

This illustration represents one expedient to prevent capillary attraction.

It does retard the action but capillary attraction knows no direction or law of nature.

It may take longer to do its work in such a block but what is to prevent moisture from going through the wall wherever the bond reaches from surface to surface?

Fig No 2



It Defies Nature's Laws

Capillary attraction will draw moisture upwards through blocks like these. Wherever the blocks overlap a bond is formed where capillary attraction can get in its work.

The Facts about Capillary Attraction

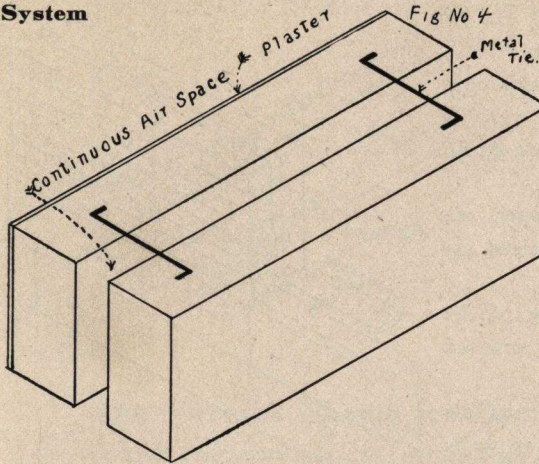
Trees and all vegetation bear out the theory of capillary attraction by drawing moisture from the ground through numerous tiny cells. Water does not run up hill but it must get there before it can run

down and capillary attraction does it. Every time you blot a letter you depend on the action of capillary attraction. Place a little water in a receptacle and see how quickly a sponge will absorb it all. Yet the sponge is made up of numerous air spaces. This is capillary attraction and the air spaces in no way prevent its action.

This is the very same principle which causes moisture to go through hollow block walls or brick and stone walls. The only way to prevent capillary attraction is to break the bond. Our form of wall construction does this.

This Block Breaks the Bond

**The Helm Press
System**



It prevents capillary attraction

At no point does a bond of cement or mortar connect the outer and inner wall.

**This is the ONLY way to
make DRY walls**

By the Helm system the walls of a building consist of an inner and outer wall, each being from 3 to 4 inches thick with a continuous air space of 2 inches or more between the two walls. These two walls are tied together with galvanized iron metal ties which will last as long as the walls stand. These ties are laid in the mortar joint.

The ties for the average size dwelling will not cost over \$5.00.

The finishing coat of plaster is placed directly on the surface of the inner block. This system saves 4 cents in furring, lathing and plastering the surface of one block 8 x 24 inches.

With this system buildings are sanitary, fireproof, frostproof and waterproof.

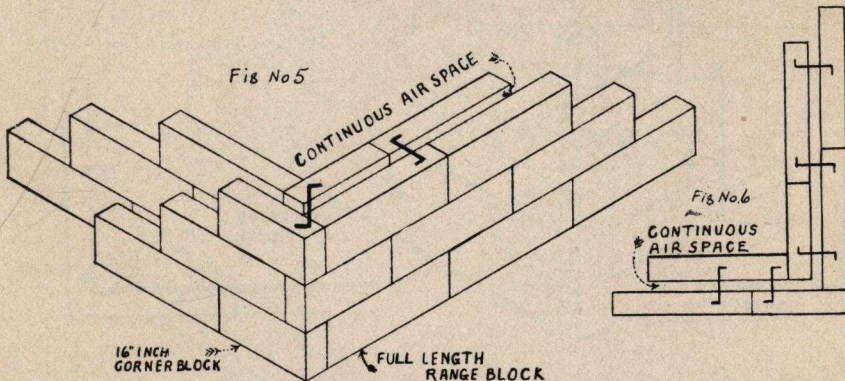
Some Practical Building Suggestions

The inventor and designer of the Helm Press is a practical builder of many years' experience.

The design of each and every block made by the Helm Press has been subjected to the strictest scrutiny. We have eliminated every feature that might in the least be called impractical.

Years of experience teach the practical requirements of these products and those turned out by this machine conform strictly to such requirements.

A Two-Piece Wall as made with the Products of the Helm Press



The wall is double, each course is usually 4" thick. The air space is 2" or more. No cement bond obstructs this air space at any point.

There is no connection from exterior to interior to carry moisture and consequently make a damp, unhealthful and unsanitary building.

Notice how perfectly the blocks bond and break joints. No detail is left unsolved. Rough blocks are used for the inner course and a block with a richer facing applied for the outer course.

Combination Brick and Block Construction

This is another immensely practical feature of the Helm Press products.

It is a clincher for landing contracts.

It is better and cheaper than clay brick construction.

The blocks for the inner wall are as cheap as the cheapest clay brick.

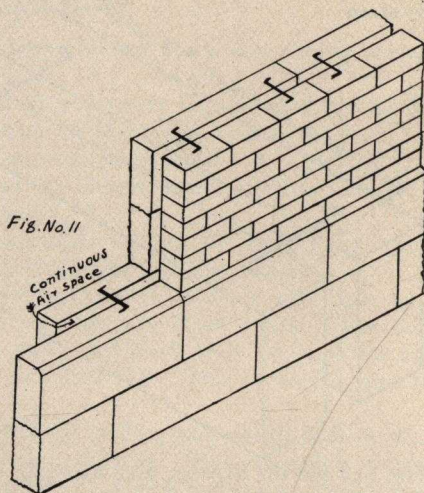
The pressed face brick, while cheaper, are equal in appearance to the highest priced repressed clay face brick.

Two courses of the coarse backing blocks will bond with 7 courses of the Helm pressed brick.

Such a wall will have the continuous air space throughout, the inner and outer walls being connected with the metal ties. This will save furring, lathing and rough coat of plaster.

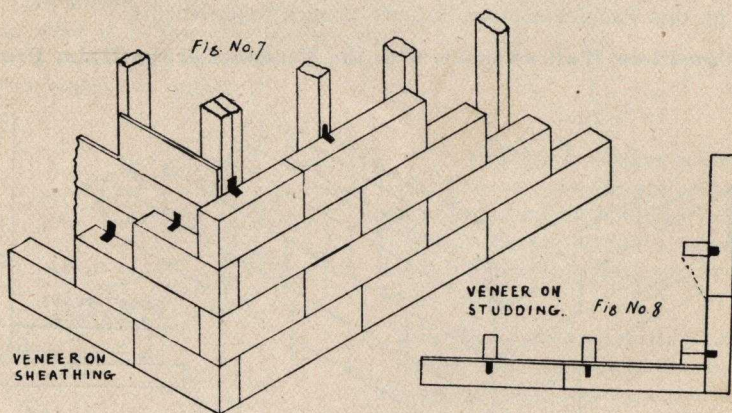
Such a building will always be dry, warm in winter and cool in summer.

For cost comparisons with other products see page 10.



Brick or Block Veneer Construction

In many localities veneer construction is very popular, especially where many brick veneer buildings are constructed. Helm Press veneer blocks and brick can be utilized for this purpose.

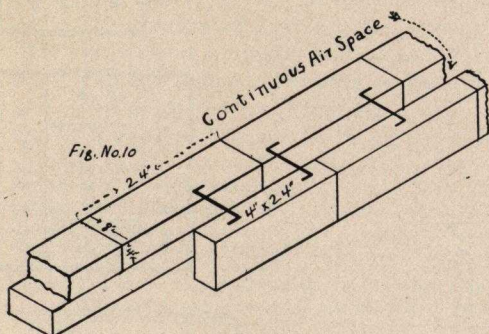


The veneering may be tied directly to the sheathing or to the studding with the sheathing on the inside. These blocks can readily be made as thin as $2\frac{1}{2}$ " , thus greatly reducing the cost, while the profit to the manufacturer remains the same.

A broad field is opened up in making these veneer blocks for repairing and rebuilding old frame buildings, giving them the appearance of all cement structures. These blocks can also be used to good advantage as sidewalk and floor tiling.

Heavy Bearing Wall Construction

Walls from 12 to 16" thick are made by laying the regular block flatwise. Two of these blocks including the mortar joint for the inner wall will equal one of the blocks laid edgewise for outer wall. The air space can be made any thickness desired.



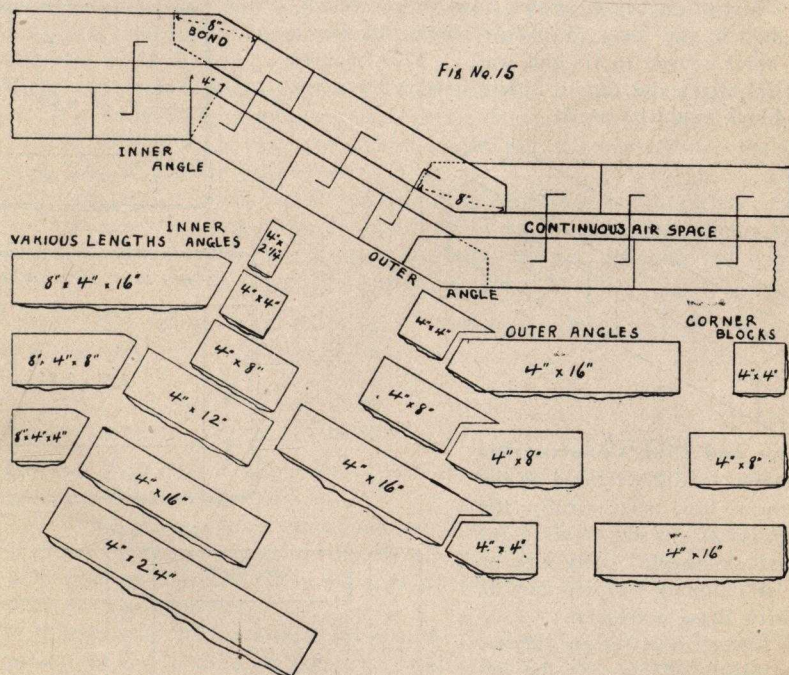
These blocks can be made with a sunken panel and save 10% of the material. This panel is placed on the pallet, which will make the sunken panel in the back of the block.

The Various Forms for Bay Window Construction

No such equipment has ever before been offered for making angle blocks.

With the various lengths our angle attachment makes you can meet every requirement of the architect.

It is this same careful consideration given to every detail that makes the Helm machines and system so popular.



For inner angles you will see that the angle blocks can be made from 4" to 16" long. The plain blocks to be used with these range from 2 1/4" to 24" long. For the outer angles either blocks can be made from 4" to 16" long.

In connection with the variety of lengths in straight blocks this set of angle attachments far excels any other equipment for this purpose ever offered.

to lay and deteriorate rapidly while the cement brick improve with age, lay more rapidly because they are perfectly true and uniform and never deteriorate.

Cement brick are graded to sell for \$8.00, \$10.00 and \$12.00 per M, while higher grades of colored or ornamental brick will sell readily at much higher figures.

Face cement brick will sell for \$10.00 and \$12.00 per M, and underbid repressed clay brick while they cost but little more than the common brick to manufacture.

Pressed Cement Brick Have Sold for as High as \$30.00 a Thousand

These brick were made on the Helm Press and consequently brought the highest prices.

The profits on cement brick always run \$2.00 per M, and up to \$5.00 while sometimes special grades will pay as much as \$10.00 per M. profit.

Cement brick are equal in every respect to the expensive repressed clay face brick, yet made so cheaply that they can compete with common clay brick and pay nice profits. They put in the hands of the builders a material they prefer to use at a price they can afford to pay.

The price of pressed clay brick is exorbitant by the time freights are paid, in addition to the high selling prices. No one wants to use common brick in nice buildings. They use them simply because they are compelled to for lack of a better brick at a moderate price. The pressed cement brick solves the problem.

Now Put Yourself in the Place of a Prospective Builder. Which Would You Choose?

The very cheapest common brick work cost \$12.00 per M, in the wall. This means 9c a square foot for 4" wall.

A pressed cement brick, true and uniform at the same price, or a two-piece block at 8c, which will cost 8c per foot in wall.

Would you prefer these cheap brick rather than pressed cement brick at the same price or blocks at a lower price?

Average cost 1,000 repressed clay face brick, \$18.00. Cost per square foot of 4" wall for the brick only, 13½c.

Competitive grade Helm Pressed Cement brick can be sold for \$12.00 per M. Cost per square foot of 4" wall for the brick only, 9c—saving 4½c per foot.

The cost of laying the cement brick will be less, but grant the same cost.

Put up a building having only 5,000 square feet of surface, using common brick for inside and face for exterior and compare with it the blocks for inside wall and pressed cement brick for exterior and **you would actually save \$275** by using the Helm Press products while the building will be even better than the clay products would make—which would you choose?

Now Compare Helm Press Products with Hollow Blocks

Cost of 24" hollow block.....24c
Furring, lathing and the rough coat
of plaster 4c

Two-piece blocks20c
No furring, no lathing, no rough coat
of plaster 00

28c

20c

Cost per square foot.....21c

Cost per square foot.....15c

For a modest cottage having only 2,000 square feet of wall surface you would actually **save \$120.00** in cost of blocks while the building would be absolutely dry and have beautiful pressed stone walls equal to natural stone.

What the Manufacturer Would Make on this Contract

On this contract for 2,000 square feet the actual profit would be \$150.00, which is 100% on the manufacturing cost. Operate the Helm Press only three days and the contract is completed.

Profits depend not only on manufacturing cost but on sales, too. These products sell in competition with all other building materials.

Could you ask for a greater profit maker? But a few such contracts will make a big annual income.

With the scarcity of lumber, the increasing cost of even the cheap clay brick and the many advantages of concrete over either, why should you hesitate to enter this profitable field?

The Durability of Concrete

At this day and age it is hardly necessary to tell the prospective builder about the durability of concrete. It has stood the test for ages. For nearly nineteen centuries the Pantheon, a Roman Temple made of concrete, has stood perfectly sound and many other like instances may be cited.

The question with the builder now is not whether concrete will stand, but instead, can he afford not to use it.

The accompanying illustration is of a concrete block residence which was built in Elmira, N. Y. in 1876, 35 years ago. It contains 5,000 cement blocks and today it shows not the slightest sign of a crack, seam, change or discoloration in a single block.

Cement Brick and Blocks Stand Fire

For years cement brick have been placed to practical tests in numerous fireplaces and chimneys, being subjected to severe fires of wood, soft and hard coal, and it is the consensus of opinion of all contractors building chimneys that they cannot be excelled for the purpose. A valuable feature is that creosote does not form in the chimney, at any rate it is never noticeable. Many a concrete building has been the only building to go through a severe fire with walls not damaged, thus proving the superior qualities of this building material.



CEMENT BRICK ABSORB LESS MOISTURE THAN CLAY BRICK

The following tests were made by completely immersing the brick in water for 12 hours. The three brick were carefully dried and weighed before immersing and weighed again when removed from the water. The pressed cement brick weighing $4\frac{3}{4}$ pounds absorbed $6\frac{1}{2}\%$. A red clay face brick repressed weighing $5\frac{3}{4}$ pounds absorbed 11%. A common clay brick weighing $4\frac{1}{2}$ pounds absorbed 22%.

The cement brick was made without the use of waterproofing. Had this been used the absorption would have been reduced to practically 1%. This proves conclusively that clay absorbs more moisture than the concrete.

Cement Brick are Strong and Hard

A 5 to 1 brick, 30 days old, stood a compression test of 41,800 pounds or 1,323 per square inch. A 4 to 1 brick that lay on the ground during a severe winter alternately freezing and thawing, stood a test of 67,200 pounds compression or 2,126 pounds per square inch, equal to 206,144 pounds per square foot. At 112 pounds per cubic foot it would require a column 2,175 feet high to crush at the base under its own weight. This would equal 181 twelve foot stories in a building.

More remarkable yet is the transverse test. This brick was placed on two blades 7" apart and a pressure of 870 pounds applied by a blade on the middle of the brick before it broke. Tests were made by Prof. Woolson, E. M., Columbia University, New York City.

By making a stronger mixture and giving proper attention in curing, product will develop even better tests.

Buying a Concrete Machine Is a Personal Matter With You

It is with us, too.

We have a reputation to sustain.

We can modestly say that we have established the highest standard the world over for concrete products and machines, so we are personally interested in each individual transaction to see that our reputation and standard are not marred.

Think of the machine as being your silent partner, then exercise the same care in selecting it that you would in selecting a partner; if you do this you will buy a Helm Press.

THESE ARE THE ESSENTIAL FEATURES TO BE CONSIDERED

in choosing a machine, after you have decided on the product—the most important feature of all, which we have taken such great pains in the preceding pages to explain for you.

First—High Quality of Product.

Second—Speed.

Third—Durability.

You cannot afford to overlook a single one of these features in selecting your machine and we court the most painstaking investigation of these very features as they abound in our Helm presses.

High Quality of Product

Poorly made concrete is the greatest enemy of your success. Many a concrete worker has learned this expensive lesson. After selecting clean, sharp sand and gravel and procuring a good grade of Portland cement, the unalterable elements of high quality are:

First—Using medium wet mixed concrete.

Second—Uniting the mixture into a solid, compact, uniform mass.

Concrete experts agree that the medium wet mix concrete makes the hardest and most enduring brick and block. The medium wet mixture is required to contain the proper amount of moisture so that each of the myriad particles of cement will crystallize with the aggregate, making stone that will stand for ages.

Exhaustive tests have proven that products made of the medium wet mix stand more pressure, consequently are better. No amount of water added after the initial set takes place will make up for the lack of it in mixing, so use a machine that will work the medium wet mix. For tamping, the dry mixture must be used to prevent sticking to face plates.

The face-up principle of the Helm Press overcomes this. With these machines cement is saved by using this medium wet mix for common brick and backing blocks and for face work, using the same mixture in connection with the Jryer facing.

The face-down principle has been widely exploited because it is possible to use a dry facing with a coarser body. The face-up principle of the Helm Press does this too and requires less facing, while the product is better because medium wet mix is used in conjunction with heavy pressure.

40 TONS PRESSURE

By a remarkable combination of power and action the enormous pressure of 80,000 pounds—think of it, 40 tons—pressure is developed on a Helm Press.

It is this terrific pressure that makes Helm block and brick the finest looking and most permanent. This irresistible crushing power on medium wet concrete welds all the elements into bricks and blocks that will resist the elements and last for ages.

This uniform pressure drives the particles of cement and aggregate into a solid, uniform mass, filling out every edge and corner clean, sharp and strong.

Welding concrete into these fire proof, moisture proof, frost proof building materials is just like welding iron. Pressure and water weld these products just as pressure and heat weld iron. The lack of either essential is just as disastrous in concrete as in welding iron.

Now is it necessary to compare this system with the laborious, antiquated system of tamping with repeated light blows? Just think how long it would take to develop this enormous pressure. This was threshed out years ago in making clay brick. That was the only way to make clay brick before presses were built. You do not hear of clay tamped brick now, do you?

SPEED

We are moving at a rapid pace today. In every business methods must be right up to the minute. To succeed, every advantage must be taken to turn the time and labor into the greatest possible profit.

Volume of business is the secret of success in big commercial institutions. This applies to your concrete factory too. You can make a bigger profit on 50,000 brick if you can make them in five days than if it required 30 to 60 days.

Ability to deliver the goods means something. If a purchaser wants 60,000 brick in a single contract, will you land it if you ask 20 to 60 days to produce the brick and a competitor displays Helm Press products and will produce the output in six days?

It is unnecessary to tie up large sums in stock in the yards for weeks and months when you have a Helm Press to produce your stuff when you want it, as fast as you want it and just as your customers require it.

The Helm hand power brick press Model 5, 10-brick machine, has turned out as high as 1,500 bricks an hour. We rate it at 10,000 brick a day.

The Helm power block press will turn out 1,000 perfect veneer or two-piece blocks in a day.

The Helm hand power brick press Model 8, 5-brick one man machine, will turn out as high as 5,000 pressed brick in a day.

The Helm power 10-brick press will turn out 15,000 pressed brick in a day.

The Helm power block press will turn out 1,500 pressed blocks in a day.

With such speed and capacity you are in a position to deliver brick or block according to schedule and to get out rush orders in a few days that would take your competitors weeks. Think how utterly impossible it would be to equal such speed with tamping devices.

DURABILITY

Helm presses are not an experiment—they have stood the test for years.

Testing new machinery is mighty expensive business. You cannot afford to do it, so do not buy an experiment.

The Helm Press was operated one entire season before a single machine was offered for sale. That is one of the secrets of its instant success and thoroughly established reputation.

Helm presses are built along practical mechanical lines, scientifically and correctly designed, constructed from the best grades of iron and steel, each part carefully selected and machined. For instance, before machining, 1800 pounds of iron and steel enter into the construction of our hand power press. This enormous weight and solid construction is required to stand the wear and tear of continued, hard usage, year in and year out, which this machine is designed for.

It is not intended that you should buy a new machine each season nor even a new machine every decade. The life of a Helm Press is unlimited.

Each and every part is built from an iron templet, so all parts are interchangeable on every machine. Only the most highly skilled labor is used in constructing these machines.

THE HELM PRESS MODEL 5

For making pressed cement brick and dry wall building blocks.
Built for hand or power operation. This machine provides
the greatest building materials of the age, materials
that absolutely must be used daily in every part
of America.

The great forests are gone—lumber bows down to the peer of all building materials—concrete—produced in its highest artistic and practical forms by Helm Presses.

These are the Simple, Easy, Labor Saving
Operations of the Model 5 Helm Press.

Place two 5-brick pallets or one block pallet in the conveyor box, fill it and pass it into the machine.

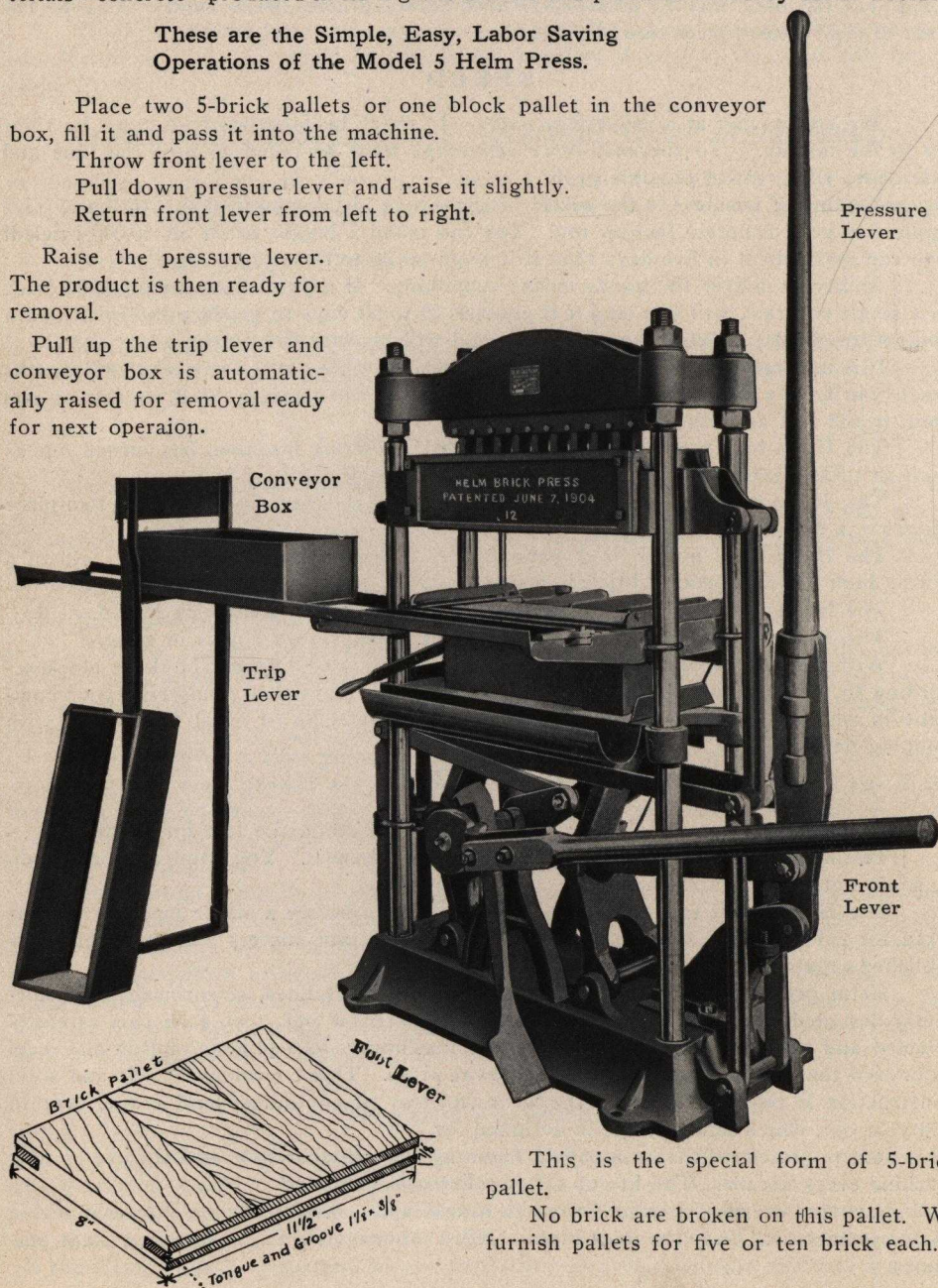
Throw front lever to the left.

Pull down pressure lever and raise it slightly.

Return front lever from left to right.

Raise the pressure lever.
 The product is then ready for removal.

Pull up the trip lever and conveyor box is automatically raised for removal ready for next operation.



This is the special form of 5-brick pallet.

No brick are broken on this pallet. We furnish pallets for five or ten brick each.

Factory Owners are the Biggest Money Makers in America. This machine will place you in their ranks.

This view illustrates one style of table convenient for use with this machine. The box filler stands on a low platform of convenient height for filling boxes quickly. This table may be built as low as 12 inches for hand mixing or receiving discharge from mixer.

A better and faster method for filling conveyor boxes is to have a bin on a level with the top of the conveyor box so the materials can be rapidly scraped into the box.

Boxes can be filled twice as rapidly in this way. Just as rapidly as these boxes can be filled the machine can be operated.

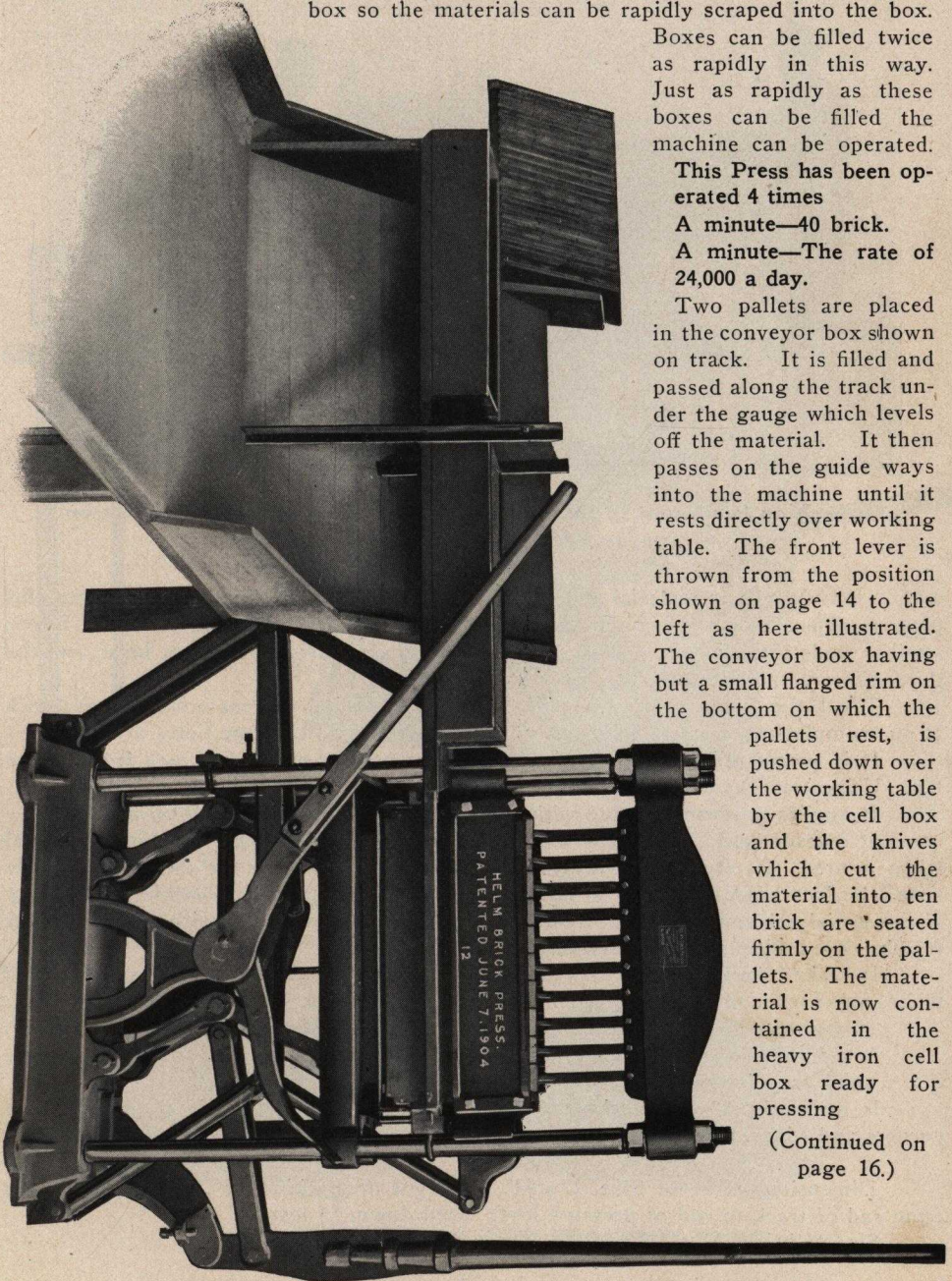
This Press has been operated 4 times

A minute—40 brick.

A minute—The rate of 24,000 a day.

Two pallets are placed in the conveyor box shown on track. It is filled and passed along the track under the gauge which levels off the material. It then passes on the guide ways into the machine until it rests directly over working table. The front lever is thrown from the position shown on page 14 to the left as here illustrated. The conveyor box having but a small flanged rim on the bottom on which the pallets rest, is pushed down over the working table by the cell box and the knives which cut the material into ten brick are seated firmly on the pallets. The material is now contained in the heavy iron cell box ready for pressing

(Continued on page 16.)



How the Enormous Pressure is Applied.

The long pressure lever is now pulled down. Aided by the fulcrum and toggle joints this exerts the 80,000 pounds pressure, forcing the entire body of material up against the face plates. The pressure lever is immediately raised slightly to release compression against the cells. (Continued on next page.)



Three Men Stationed in this Manner will Produce 10,000 Bricks or 1,000 Blocks Daily

with assistants to mix material and care for the product. The number of men for this purpose depends on the equipment of the plant. One man fills the conveyor boxes, another feeds the machine, operates the front lever and assists on power lever, and the third offbears and operates the power lever.

The Helm Press makes ten perfect, uniform pressed cement brick or one block at one complete operation. It is easily operated from two to three times a minute.

It is successfully and economically operated by any number of men from one to ten. Using a mechanical mixer saves 25% of the labor cost for brick or blocks.

It applies uniform pressure with sufficient power to secure uniform density.

It presses brick and blocks face up so they are easily faced with finer material when desired. Its face plates are in contact with the product for the least possible time. It does not exceed ten to fifteen seconds. This makes it possible to use very wet material for common brick and blocks and coarse, wet body with dry facing for face brick and blocks without sticking to the face plates.

It makes brick and blocks without a troweled, stroked or tamped surface. It makes any veneer or two-piece block required in a building.

It uses true concrete under heavy, uniform pressure in making brick and blocks.

It reduces the labor cost and saves cement by pressing the medium wet mixture into a solid mass having the least porosity.

It makes brick and blocks that have dense, hard, beautiful faces, clean, sharp corners and edges, perfectly true and uniform.

Dimensions—Size of base, 17 x 44". Height of machine, 60". Extreme length from end of track to end of pressure lever when down, 13 feet.

Size of brick, $2\frac{1}{4} \times 3\frac{3}{8} \times 8$ ".

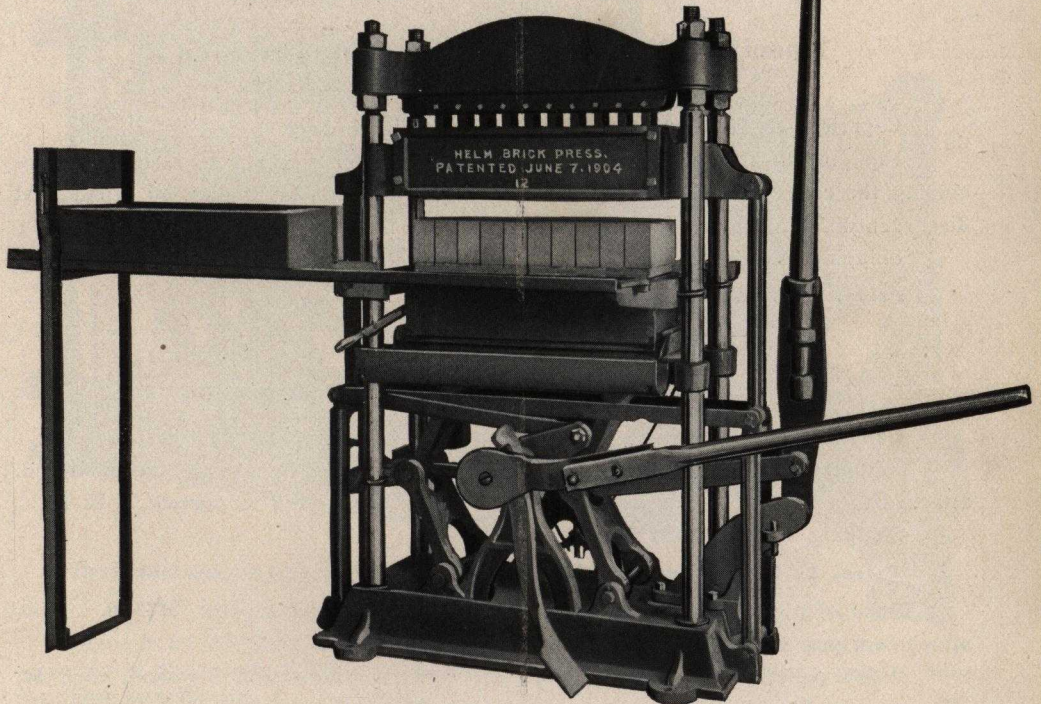
The Operation Completed

To complete the operation the operator steps on the foot lever and pulls the front lever back to the right, which lifts the cell box and knives up and away from the brick.

The pressure lever is then raised to upright position, carrying the brick down and away from the plungers.

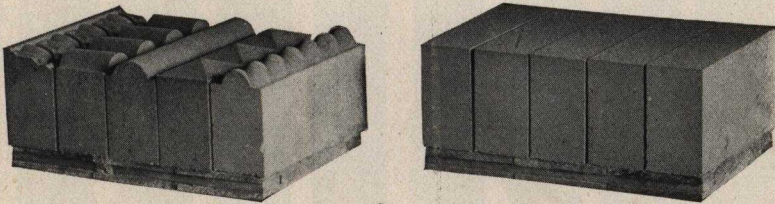
The brick or blocks are then passed to the back table and removed by the offbearer.

The trip lever at the left is next operated, raising the conveyor box to be removed and passed to the filling table. Three of these boxes which are furnished free, form a circuit, keeping the machine supplied and avoiding delays at any point of the process.



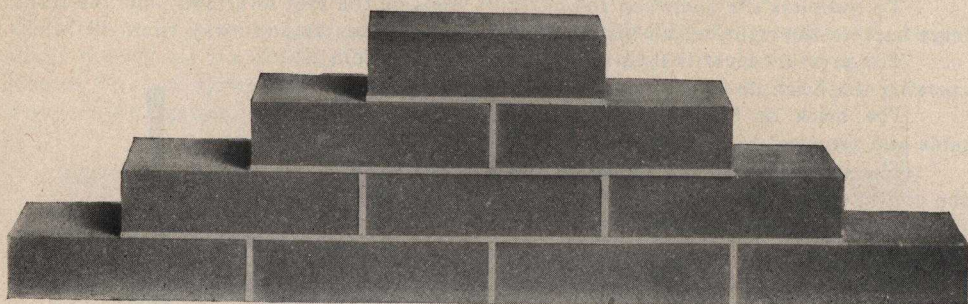
After the brick or blocks are formed and taken from the machine, they are placed on cars or spring platform trucks and transported to the curing room, remaining on pallets about 48 hours when they can be removed and piled.

Blocks are made in substantially the same manner the brick are formed. There is no lost labor in opening and setting up a mould box for each block as required in other machines. This press is automatic and requires the least amount of manual labor.



The 10 brick, plain or ornametal, as they come from the machine

These Ten Beautiful Brick Made by One Operation



Specifications of Model 5 Helm Press as a Hand Power 10-Brick Machine.

Capacity—10,000 plain or ornamental pressed brick daily.

Equipment—This press is complete as illustrated on pages 14 to 17 inclusive, including the conveyor track, three conveyor boxes, 10 plain brick dies, 10 ornamental dies, each different, for the designs shown below, and 50 sample wood pallets.

Shipping Weight—1750 pounds.

Price, F. O. B. factory, \$290.00.

As a Power 10-Brick Machine

Capacity—15,000 plain or ornamental pressed brick daily.

Equipment—As described above, including the power attachment as illustrated, attached to a Model 5 block press on page 19. Power required to operate, 5 H. P.

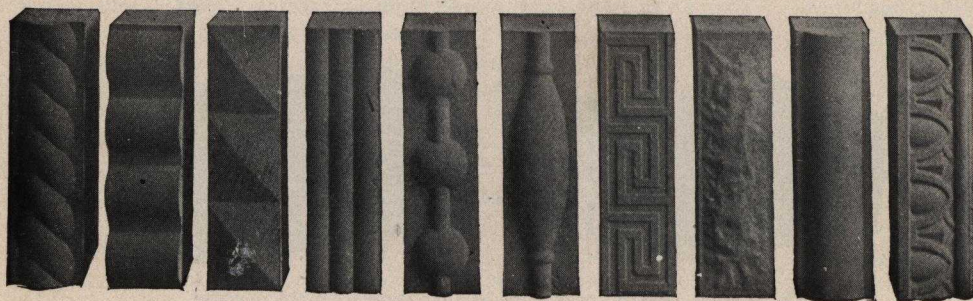
Shipping Weight—2450 pounds.

Price, F. O. B. factory, \$450.00.

Price of power attachment when furnished separate from press, \$175.00. This attachment may be attached to a Model 5 press at any time.

Wood pallets, 5-brick size, three-piece construction weight 1 pound, each 5c. (For price on block making equipment, see page 21.)

One Operation also Made all these Ornamental Brick



The Helm Press Model 5 as a Block Press and the Power Attachment for the Model 5 Press.

AUTOMATIC—RAPID—DURABLE
ENORMOUS PRESSURE



INTERCHANGEABLE FOR BRICK AND BLOCKS, AND FROM HAND TO POWER OPERATION

This is an exclusive Helm feature, making it possible to install the best equipment in the plant right at the start, and increase the output from time to time by adding these attachments.

The Power Attachment

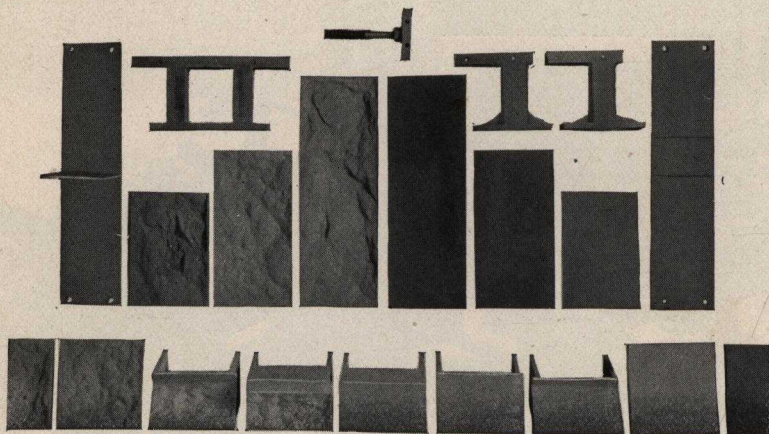
It is illustrated in connection with a Helm Press fitted for making plain blocks with a block formed ready for removal. This attachment can be added to any Model 5 Press at any time. It is back geared 6 to 1. The power pulley is 16" in diameter with 6" face. Size of base 29" long by 21" wide. Width over all, 36", height, 36", weight 700 pounds. It is built for heavy service and so constructed it can be attached to any Model 5 Helm Press now in use.

Capacity—The speed of the machine is limited only by the ability of the operators to get the material to and away from it. Three operations a minute are completed with ease. The daily output is easily 15,000 brick or 1,500 blocks, operated by 5 horse power.

Method of Operation—A conveyor box is filled and passed into machine. Front lever is swung to the left. Touch the trip lever with the foot and the power acts instantly, completing the operation and leaving the machine in position illustrated above, ready for removal of product. Instantaneous and automatic in operation and stops automatically. A belt conveyor can be attached directly to back table, thus dispensing with one operator.

Equipment for the Model 5 Block Press for Dry Wall Two-Piece Blocks and Veneer Blocks.

This illustration shows all the necessary parts to make the various blocks required in veneer construction and dry wall two-piece construction as illustrated throughout this catalog. The prospective purchaser will be at once impressed with the simplicity and the few parts required. This equipment will produce the necessary blocks to meet the various requirements of any contractor and builder. All the blocks illustrated on pages 22 and 23 are produced with this equipment.



The Complete Equipment is as follows:

- | | |
|------------------------------|------------------------------------|
| 1 16" plain plunger No. 30. | 1 8" plain plunger No. 4J. |
| 1 16" rock plunger No. 31. | 1 8" rock plunger No. 41. |
| 1 16" standard No. 32. | 1 spring block No. 42. |
| 1 5" rock end No. 33. | 1 24" rock plunger No. 43. |
| 1 5" rock mitre end No. 34. | 1 24" plain plunger No. 44. |
| 1 5" plain mitre end No. 35. | 1 12" rock plunger No. 45. |
| 1 5" plain angle end No. 36. | 1 12" plain plunger No. 46. |
| 1 5" plain end No. 37. | 1 pair plunger stems No. 47. |
| 1 4" plain plunger No. 38. | 2 cell box sides with two grooves. |
| 1 4" rock plunger No. 39. | 1 dividing blade. |

The Helm Model 5 Combination Brick and Block Press

The Model 5 Helm Press is usually purchased fitted complete with the brick making equipment as shown on pages 14 to 17 and block making equipment as described and illustrated above. This complete equipment makes up the Model 5 Combination Brick and Block Press.

By using all this equipment the Helm Brick and Block Press is:

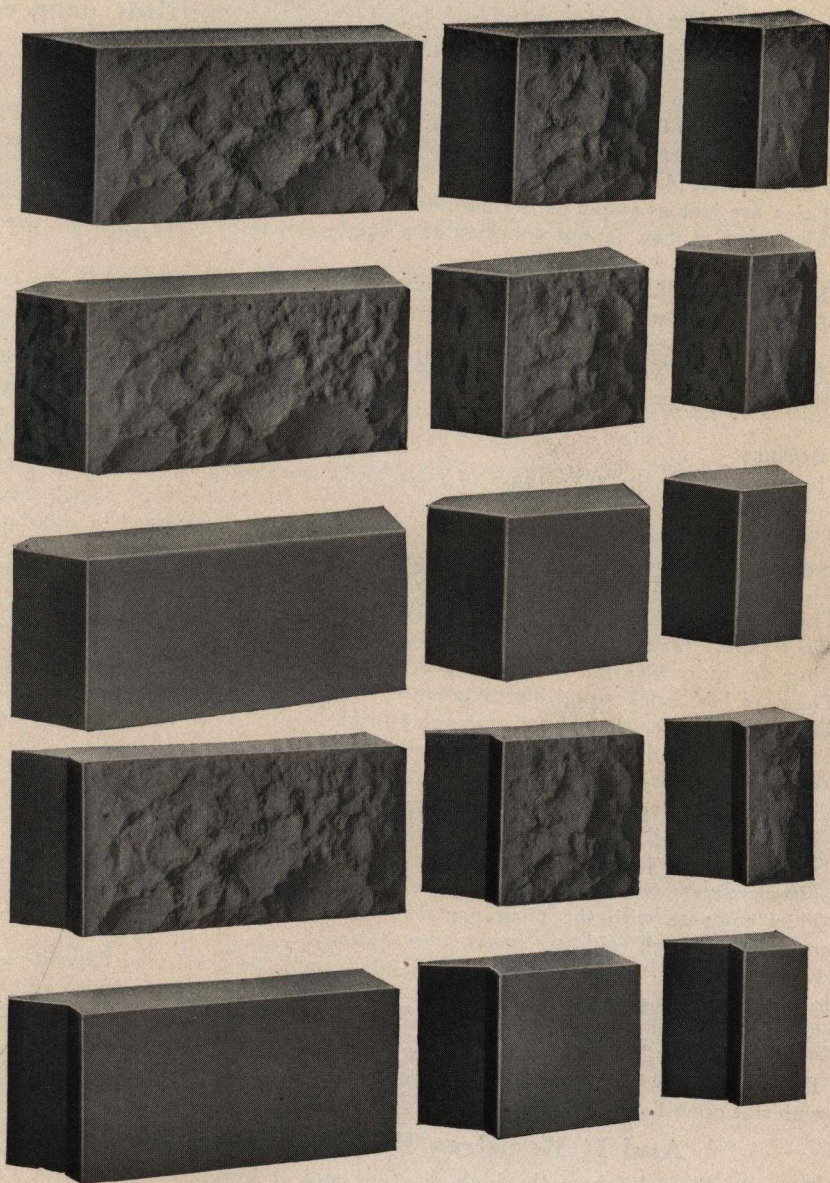
A complete brick press, making 10,000 plain and ornamental brick daily.

A 24" face-up block machine with a capacity of 1,000 blocks daily, plain or rock face, in full lengths, half lengths, and other fractional lengths, and various bay window angles.

A complete 16" face-up block machine with a capacity of 1,000 blocks daily, full lengths, half lengths and quarter lengths, and regularly equipped for plain and rock face blocks, angle blocks and corner blocks.

Three times the investment in other machinery would be required to equal this in capacity and range of work, to say nothing of the profit making possibilities.

DRY WALL Two-piece blocks and plain and ornamental pressed cement brick are a winning combination, defeating all competition. For price of this combination outfit see page 21.



These are the regular angle blocks turned out by the regular block equipment. These blocks are made 16", 8" and 4" long. To complete the inner angle a plain or rock face block shown on opposite page is also used. These various blocks will take care of every requirement of the architect and builder. They give entire satisfaction.

TEN BILLION BRICKS

10,000,000,000

Used Annually in the United States, 33¹/₃ million used each working day. How can these striking figures help but startle you?

A slice of this fat, juicy melon is waiting for every purchaser of a Helm Press. No matter where you are—how little the town—how big the city—for every community is a market place for brick.

Brick are just as staple as the clothes on your back or the bread that you eat.

The mind of man cannot conceive of a single article of more common use than brick.

Millions in actual profit are made annually out of brick.

A Helm Press will make big profits for you.

Just as sure as you make Helm pressed cement brick you can sell them, for they are better than clay brick—

Because

- 1st—They possess all the advantages of other brick multiplied by the superior lasting qualities of concrete.
- 2d—They are truly pressed brick—no brick user will refuse a pressed brick in preference to a common brick or any brick made in any other way.
- 3d—They are perfectly true and uniform in size.
- 4th—They compete with common clay brick in price.
- 5th—They endure forever and get stronger with age.
- 6th—They are more pleasing in appearance.
- 7th—They are laid quicker and better because of their uniformity in size.
- 8th—They are stronger than the average clay brick.
- 9th—They can be made of any color or design.
- 10th—They absorb less moisture.
- 11th—They can be made perfectly waterproof.
- 12th—They successfully resist frost.
- 13th—They are more fireproof.
- 14th—They compete with common clay brick in price.
- 15th—They compete with the most expensive, high grade, repressed clay face brick in quality though sold at a lower price.

Each year sees the cost of clay brick advancing, the good clay deposits getting scarcer, while million after million of these brick go into buildings which ought never to be used. In fact, are used simply because better brick are not within reach of the user.

Every person whose eyes rest on these statements must be convinced that here is a wonderful open field.

And It Requires But Little Capital

To make these brick of the highest grade and at lowest cost, a Helm Press is required.

Every experienced cement worker realizes this. The building of a profitable cement brick business is simplified by using a Helm Press.

Each Thousand of Cement Brick Turned Out by a Helm Press Means from \$2.00 to \$10.00 Net Profit to its Owner.

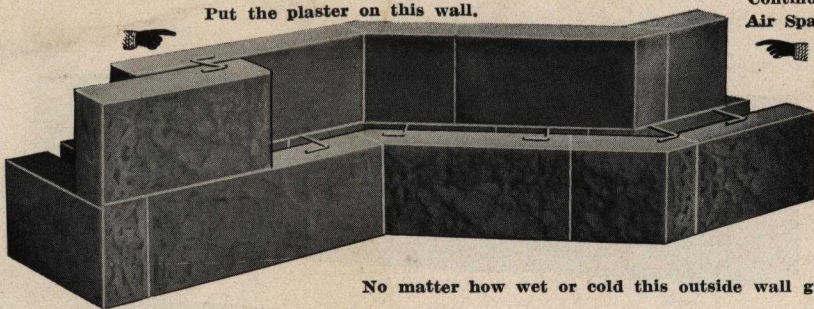
This profit can be made with either of our Helm Presses—the 10-brick press described in the preceding pages, or with our 5-brick one man brick press.

Our DRY WALL System Demonstrated

Always
Dry
Here

Put the plaster on this wall.

Continuous
Air Space



No matter how wet or cold this outside wall gets.

A rigid wall that will carry enormous loads.

A wall that is always DRY.

A wall that makes buildings warm in winter and cool in summer.

Complete with corners, inner and outer bay window angles, while the continuous air space is never broken. Not a single detail overlooked.

DRY WALLS is the irresistible feature that gets the attention of every builder and contractor. And this is the practical way to make dry walls.

How to make the building dry and warm is always the decisive feature. This is where Helm Press operators land the contracts, besides making better product at a lower cost.

Specifications of Model 5 Hand Power Block Press

Capacity—1,000 single course 24", 16" or fractional blocks daily.

Equipment—Consists of Model 5 Press as illustrated on pages 14 to 17, without brick equipment, but fitted with the complete block equipment illustrated and described on page 20, conveyor track, 3 conveyor boxes, 25 block pallets. Shipping weight, 2,000 pounds.

Price, F. O. B. factory, \$310.

As a Power Block Press

Capacity—1,500 single course 24", 16" or fractional blocks daily.

Equipment—Same as above with power attachment included. Shipping weight, 2,700 pounds.

Price, F. O. B. factory, \$475.

Model 5 Combination Brick and Block Press

Equipment—Complete with brick and block equipment as described on pages 14 to 21, conveyor track, 3 conveyor boxes, 50 sample brick pallets, 1 sample block pallet, for hand operation. Shipping weight, 2250 pounds.

Price, F. O. B. factory, \$365.

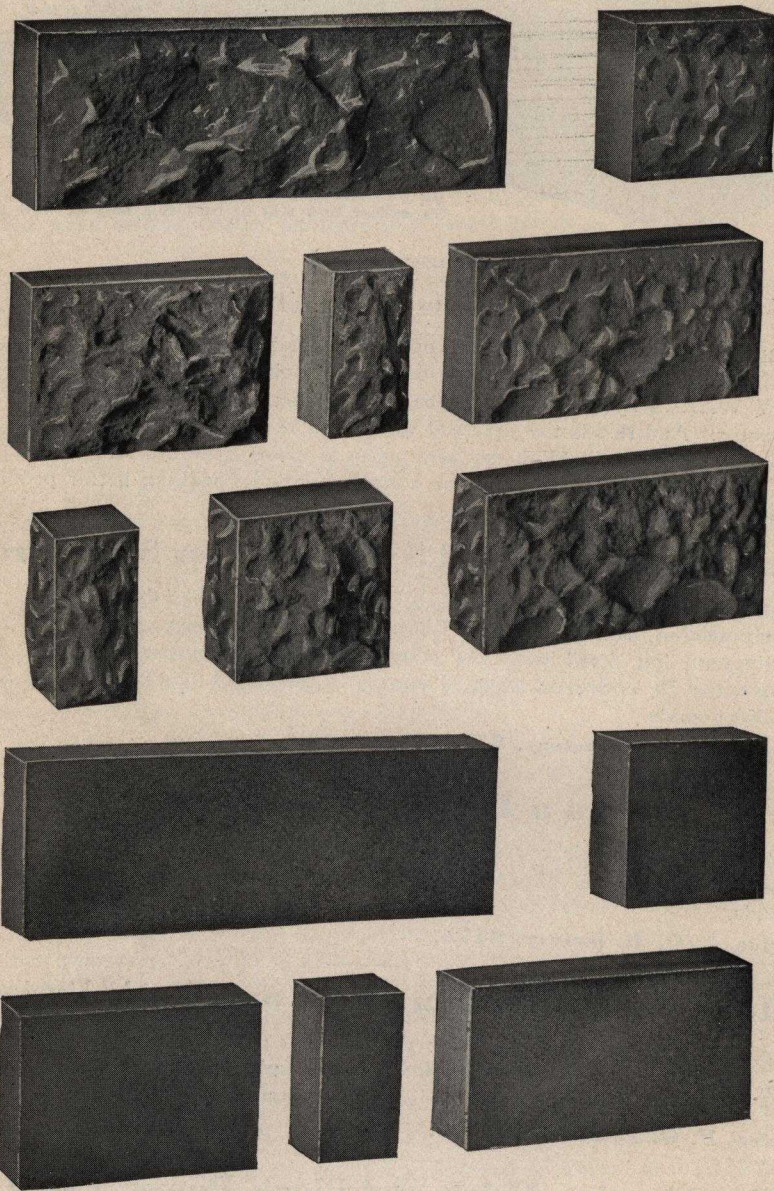
Combination Brick and Block Power Press

Equipment—Same as combination hand power outfit, with power attachment included. Shipping weight, 2950 pounds.

Price, F. O. B. factory, \$525.

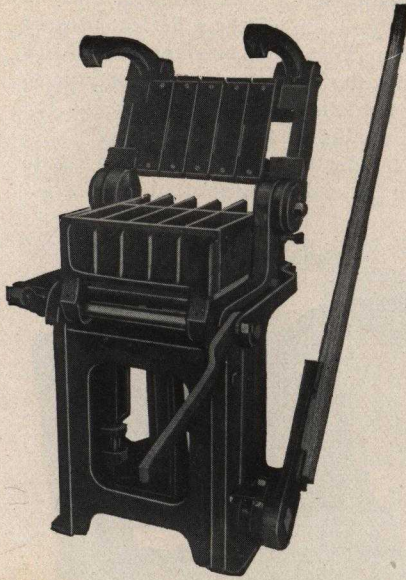
Price of the complete block equipment when purchased separately to be used with the Model 5 10-brick press, \$75.00.

Block pallets, pine, special construction, weight 2 pounds, each 10c.



These are the regular range and corner blocks turned out by the regular block equipment. These blocks are regularly made 4" thick but can be made as thin as 2½" for veneering. The actual lengths are: 23½", 15¾", 11½", 8" and 4". They lay 8" high in the wall.

The Helm Press Model 8 As A Brick Press



The Cell Box closed ready to receive material after placing hopper in position

A Marvel of Simplicity, Speed and Durability.

Owing to the repeated demands for a smaller and cheaper press possessing the exclusive features of our Helm 10-brick press for economy of operation and quality of product, we have worked out these successful principles in our one man press.

In this one man press we have combined the three important features of our Helm 10-brick press.

1st—High quality of product.

2d—Speed.

3d—Durability.

First—The brick from this press are equal in every respect to the brick from the No. 5 press, which is the strongest endorsement the product can have.

Second—The output per man up to the maximum capacity is just as great with this press as with the other.

Third—The same care is exercised in building these machines so they will be substantial and last a life time.

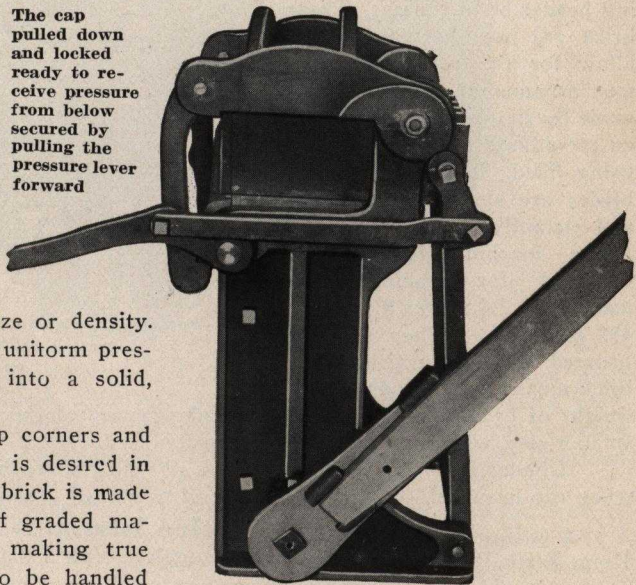
Simplicity Predominates in this Brick Machine

No Experience is Required to Operate it Successfully.

When the five cells are filled, one sweep of the pressure lever positively forms perfect brick. It removes entirely the dependence on the operator to produce well Compressed brick. This can be said of no other known method.

The pressure on the five brick is correspondingly as great as that of our larger press. It simply presses five brick at a time instead of ten. The brick are pressed face up and rest on a wooden pallet on which they are readily handled without touching each brick individually when yarding them.

The cap pulled down and locked ready to receive pressure from below secured by pulling the pressure lever forward



There is no variation in size or density. Each brick receives the same uniform pressure, forming the materials into a solid, compact mass.

The brick have clean, sharp corners and a perfect face, giving all that is desired in appearance. A strong, hard brick is made by using medium wet mix of graded materials from $\frac{1}{2}$ " ring down, making true concrete which is too wet to be handled successfully unless used in a face up pressure machine like the Helm Press.

Each time the minute hand goes around sees two completed operations with this machine; the result—10 perfect, beautiful, uniform, strong, hard pressed cement brick,

Other Features of the One Man Brick Press

One man at this press if supplied with the mixed concrete and with assistants to take care of the brick will press from 4,000 to 5,000 daily. Each will be a perfect pressed brick of the same quality that our large press makes. With this machine 1,000 brick per day per man can easily be averaged. This includes the labor for the entire process from raw material to yarded product ready for the market. Machine mixing and improved yarding facilities will save from 25% to 50% of this labor.

This is an ideal outfit for the contractor and builder who wants portable equipment for making brick on the building site as it can be easily transported from place to place.

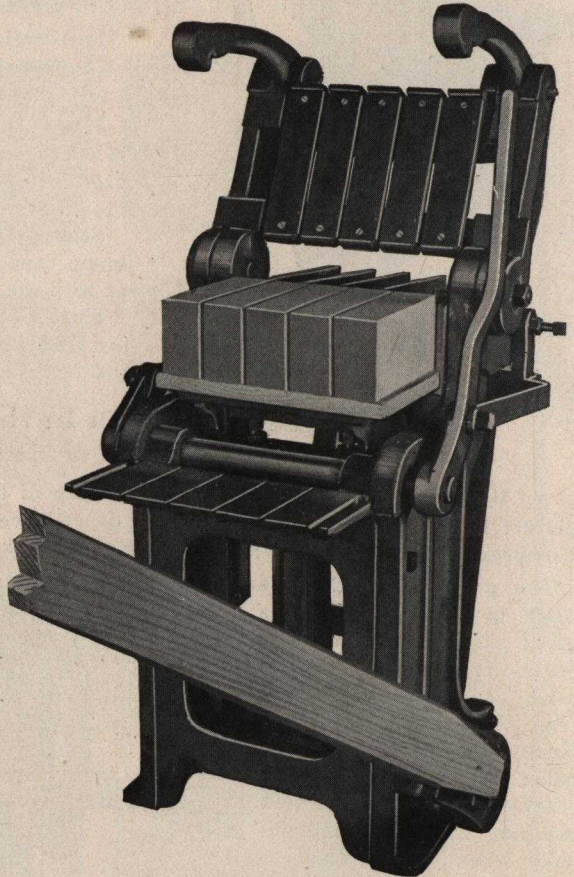
This press is proving just as popular as our 10-brick press. Many parties who did not purchase the larger machine because of its large capacity, have later inquired for and purchased this small press, giving us flattering reports on their success with it.

This press weighs 750 pounds. It is built of the best grades of iron and steel, carefully machined and assembled. The face plates are made from polished steel. They can be easily removed and replaced by the ornamental plates.

The machine is equipped with five rock face plates of various designs, in addition to the plain face plates and an end gate is furnished for making the rock face brick with return ends to be used on corners and in laying header bond courses. These brick are not shortened up to allow for the return. Various ornamental designs can be made by simply inserting wooden mouldings in the cells after being filled. The steel division blades are slotted at the back and instantly removable.

The machine is regularly equipped for making brick measuring $2\frac{1}{4} \times 3\frac{3}{8} \times 8"$, weight $4\frac{1}{2}$ pounds. When specially ordered it is furnished for brick measuring $2\frac{3}{8} \times 4\frac{1}{8} \times 8\frac{3}{8}"$, weight of brick about $5\frac{1}{2}$ pounds. Unless specified the machine is furnished for the smaller size, which we recognize as the standard.

Dimensions—Size of base, $17\frac{1}{4} \times 19"$. height when cap is down, $36\frac{1}{2}"$; height when cap is raised, $46\frac{1}{2}"$; length over all to end of pressure lever when down, 10 feet.



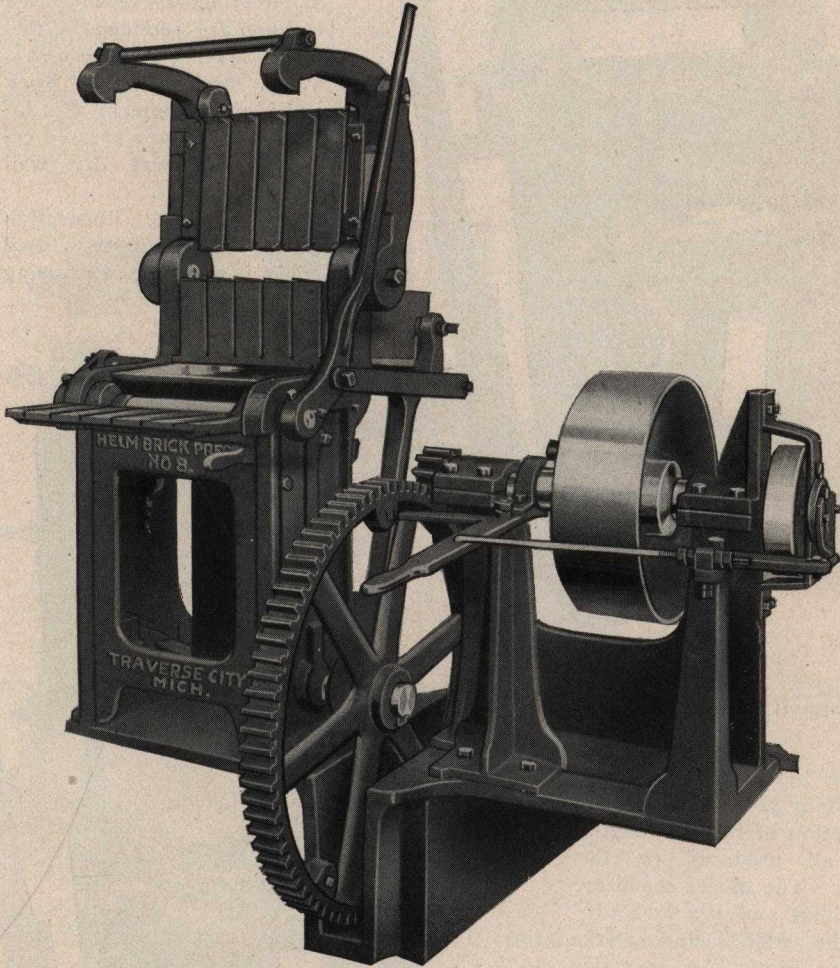
The operation completed, cell box opened and the pressed brick ready for removal on the pallet

Price List.

Helm Brick Press Model 8 equipped complete with 5 plain face plates and end gate, 5 rock face plates and end gate, 25 wood pallets and hopper, shipping weight, 750 pounds, F. O. B. factory.....	\$165.00
Same equipment with power attachment included.....	265.00
Wood pallets, clear pine, three-piece construction, each.....	.05

Power Attachment for Model 8 Press

By using this power attachment the capacity of this press is increased. As so many plants are now equipped with power it requires but little additional outlay to operate a Helm Press by power. To apply the enormous pressure to the five brick all the operator does is touch the trip lever. The power throws out of action automatically. It acts instantaneously. The enormous pressure is distributed over the surface of the five brick. With this attachment is furnished the iron base to which the machine and attachment are securely bolted.



As with the hand machine, the rock face corner brick are not shortened in order to allow for the return end. Consequently they break joints and bond properly when placed in the wall. Where a header bond course is used these brick can be made with plain faces and rock ends. The attachments for making these bricks are furnished free with the hand or power press.

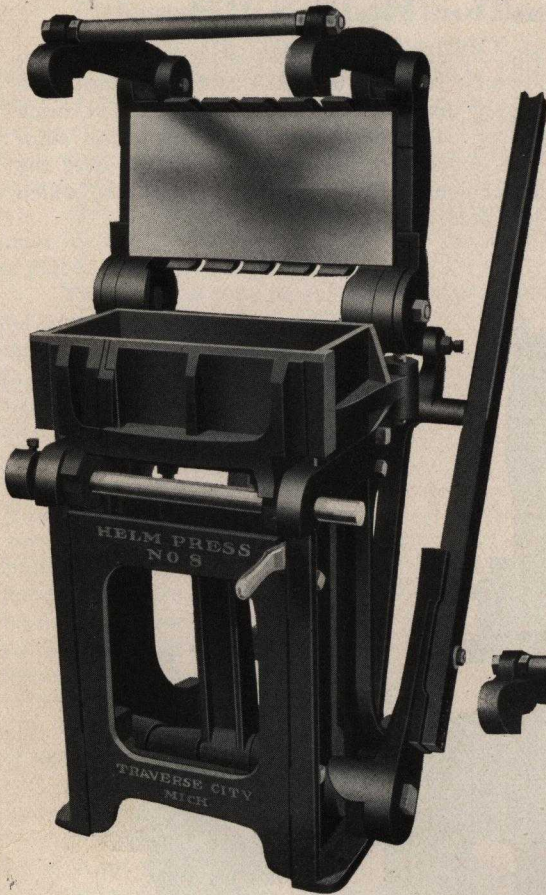
The length of the power attachment is 36", width 30", height 27", the drop in the base to take care of the gear wheel is 12". This attachment is back geared 9 to 1 and consequently develops enormous power when the crank shaft carries the pitman on to the center when the heaviest pressure is applied. The weight of this complete outfit is 1300 pounds.

Helm Press Model 8 As a Block Press

**For Dry Wall Blocks
And Veneer Blocks.**

This press has been brought out to meet the demand for a smaller and cheaper press than our Model 5 Helm Press. All the advantages of the Model 8 Press in brick making are retained in this block making equipment. When fitted with the brick and block equipment it is interchangeable for pressed cement brick and dry wall building blocks.

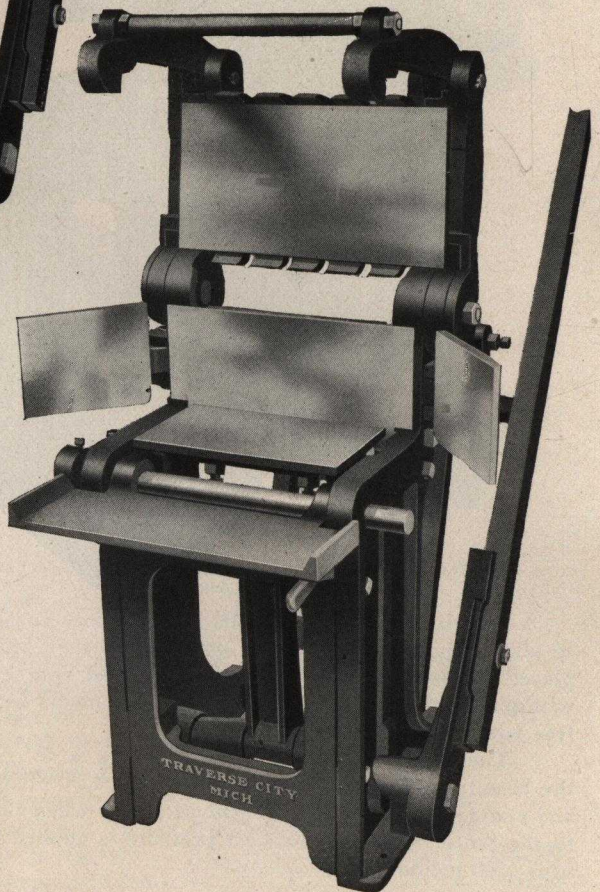
The opposite illustration shows the machine closed ready for filling and pressing a 16" plain block.



Capacity 500 Blocks Daily

The block designs shown on pages 22 and 23 with the exception of the 24" lengths, are all produced on this press. The blocks made are 16" long and lay 4x8x16" in the wall including the mortar joint. The exact size of the block is $4\frac{3}{4} \times 15\frac{3}{4}$. The machine is equipped for fractional lengths of 12", 8" and 4", return end corner blocks and angle blocks for bay windows of various lengths.

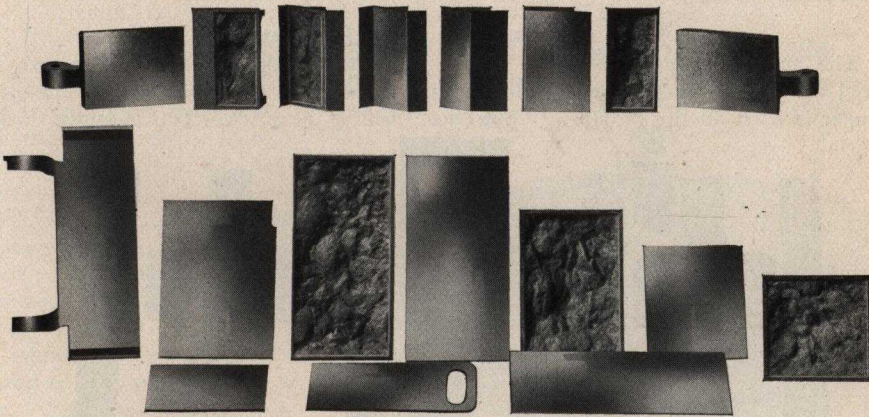
The opposite illustration shows the machine open after the block has been pressed and removed.



The Equipment

The illustration below shows all the necessary parts required with the Model 8 Press for making the various plain and rock face blocks and angle blocks up to and including the 16" lengths. The parts are as follows:

1 Left End Gate	No. 71	1 4" Plain Face Plate.....	No. 80
1 Right End Gate	No. 72	1 Blade	No. 81
1 Front Gate	No. 73	1 Back Plate	No. 82
1 Rock End	No. 74	1 12" Plain Face Plate	No. 83
1 Rock Miter End	No. 75	1 16" Rock Face Plate	No. 84
1 Plain Miter End	No. 76	1 16" Plain Face Plate	No. 85
1 Plain Angle End	No. 77	1 12" Rock Face Plate	No. 86
1 Plain End	No. 78	1 8" Plain Face Plate	No. 87
1 4" Rock Face Plate.....	No. 79	1 8" Rock Face Plate	No. 88



Specifications of Model 8 Hand Power Block Press

Capacity—500 single course 16" or fractional blocks daily.

Equipment—Consists of Model 8 Press as illustrated on page 28, fitted with the complete block equipment illustrated above with 25 block pallets. Shipping weight, 900 pounds.

Price, F. O. B. factory, \$185.

As a Combination Brick and Block Press

Capacity—500 blocks or 5,000 brick daily.

Equipment—Model 8 press equipped with 5 plain brick face plates and end gate, 5 rock face plates and end gate, 25 wood pallets and hopper, together with the complete block equipment illustrated and described above, and one sample block pallet. Shipping weight, 1025 pounds.

Price, F. O. B. factory, \$215.

Price of the complete block equipment when furnished separately to be used with the Model 8, 5-brick press, \$50.00.

Block pallets, pine, special construction, each, 7c.

BIG PROFITS IN ORNAMENTAL BRICK

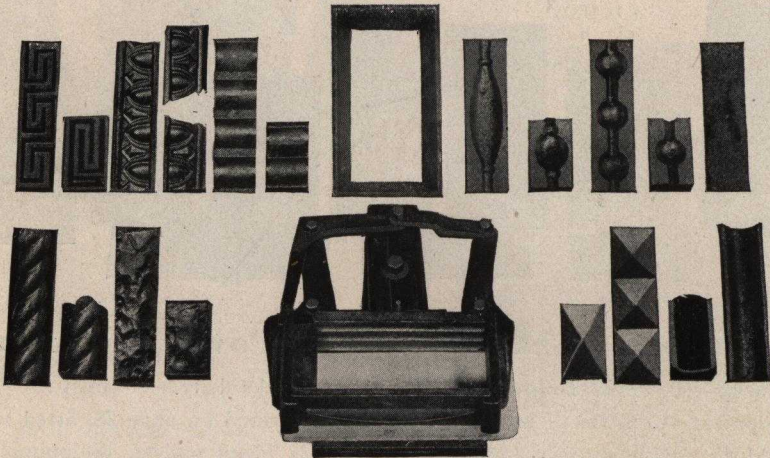
This is a wonderful field and the profits are BIG. There is only a handful of manufacturers of ornamental clay brick but they are waxing rich. They get as much as 25 cents for a single brick. Most of their brick are used for fire places, being too expensive for general use but the ornamental cement brick can be sold much cheaper therefore offer a much larger field. It is impossible to make a better ornamental brick than those herewith illustrated.

Anyone can make these brick. The brick for a single ornamental fire place sell for \$35.00 to \$250. Several large corporations make thousands of dollars annually out of ornamental clay brick for this purpose. You can get this business. You can beat the clay brick prices and then make enormous profits. All you need is this little machine.



The Automatic Brick Mould

The accompanying illustration shows this mould locked ready to receive the material for making an ornamental brick with the end of the brick also ornamented. A hopper is used on the mould in filling and forming the brick. The mould is locked



and unlocked automatically. By throwing back the lever at the left both ends open away from the brick so the end design and front plate may be removed. The brick is then removed on the pallet, a new pallet put in position and then locked again. Ten different face and end designs are shown. These are all furnished, and a plain face plate also.

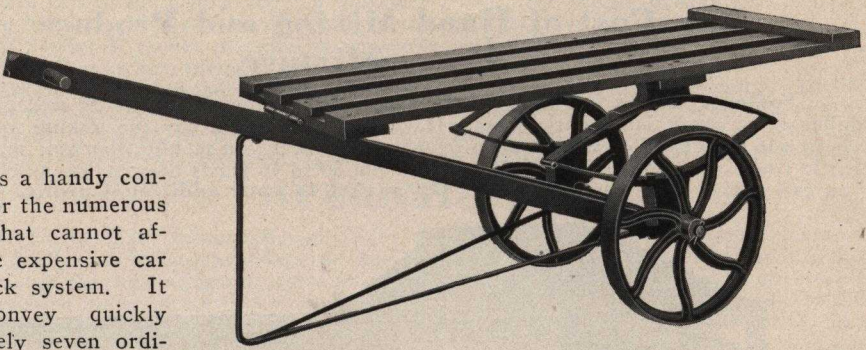
Numerous other designs can be made by simply inserting wooden mouldings. There is no limit to the various designs. The plates can be changed instantly to any of the designs.

Every concrete worker should use this mould not only for the immense profit in ornamental brick but because these brick are the very best advertising any plant can have. Samples like the above, placed on display, will bring business in other lines also. A single fire place contract will more than pay for this mould.

This is a wonderful value at a remarkably low price. The plates alone usually sell for \$1.00 each and 50c for end plates, making \$16.50 for the plates alone to say nothing of the mould. This complete outfit weighs 70 pounds. The price we quote below makes this mould a leader.

Price, F. O. B. factory, for mould with hopper, 10 ornamental face plates,
1 plain face plate and 11 return end plates.....\$15.00

The Queen City Brick and Block Truck



This is a handy conveyor for the numerous plants that cannot afford the expensive car and track system. It will convey quickly and safely seven ordinary hollow blocks or 70 brick at one load. At least two should be used, so when one is being loaded another can be in curing room for unloading. This truck will save labor and prevent breakage.

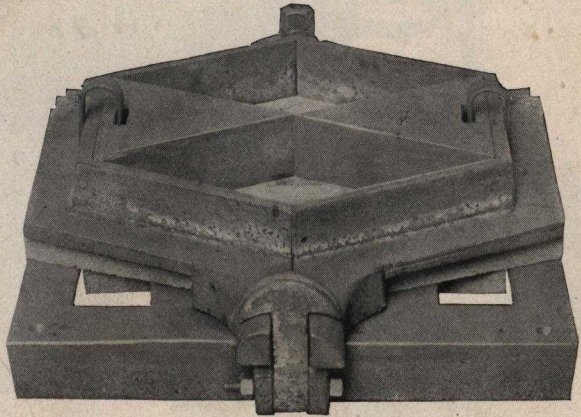
Price, F. O. B. factory, \$10.00. Shipping weight, 135 pounds.

Combination Hexagon and Diamond Tile Mould

This is a simple, quick acting mould for making one Hexagon tile or two diamond tile at one operation. Standard size, 12" hexagon 2" thick. Wood pallets $\frac{7}{8}$ " thick are used. It costs from 3 to 5c to make the 12" hexagons and they sell for 7 to 10c. Ten of these tile will lay a square yard of walk or floor. Tile walks are self draining and very popular wherever used. Each mould is equipped with arms for hexagon tile and filler forms for the diamond shapes. Shipping weight, 100 pounds.

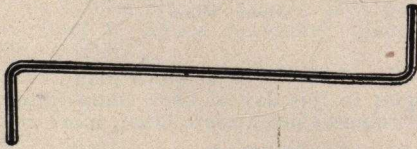
PRICE LIST

12" machine, complete, \$12.00
16" machine, complete, 13.50
18" machine, complete, 15.00



Price List on Wall Ties

For the benefit of purchasers of Helm Machines, we quote on the various wall ties which are used with two-piece blocks and veneer blocks. The wire ties are made from medium hard galvanized wire. No. 10 wire.

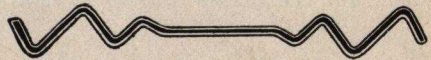


Sure Grip Tie

Length 7", weight per M., 52 lbs., per M., \$3.25
Length 9", weight per M., 60 lbs., per M., 3.75

O. K. Tie

Length 7 $\frac{1}{4}$ ", weight per M., 50 lbs., per M., \$3.25



Standard Veneer Tie

Length 5 $\frac{1}{2}$ ", weight per M., 70 lbs., per M., \$5.00

This tie is made from sheets of galvanized iron, punched with two nail holes. Semicircular projections are struck up from the body of the metal with which the mortar engages. These ties are 1" wide made of 20 gauge iron. These prices are F. O. B. factory in 5,000 lots.

Our **LITTLE GIANT** will Mix for You at One-Half the Cost of Hand Mixing and Produce a Better Mixture.

For every dollar you now put into hand mixing our Little Giant will put a half dollar extra profit into your pocket. If you spent \$10.00 a day for mixing, our Little Giant will turn \$5.00 of it into clean profit above what you would otherwise make. Our Little Giant will thoroughly mix in a day from 30 to 40 yards of concrete as cheaply as you can mix 15 to 20 yards by hand, **the saving is your additional profit.**



Our Little Giant Hand Concrete Mixer
Rear View

Machine mixing will greatly increase the profits of any brick or block plant. No concrete contractor can afford to be without a mixer in this day of keen competition. Hand mixing is far inferior to machine mixing. It requires much more labor, more cement, and the mixing is never so thorough.

Our little Giant hand power mixer fully meets the demand for a small machine with sufficient capacity to make a **REAL** saving over hand mixing and it is by far the cheapest reliable mixer on the market today. There is no other mixer on the market today which will produce as much concrete that does not cost far more than this machine and hundreds of users have proven the reliability of this low price mixer.

General Construction

The Little Giant is made entirely of iron and steel. The hoppers and the mixing drum are of heavy sheet steel. The mechanical parts are strong, positive and simple. There are no paddles to wear or trough to cut through.

The mixing drum is hung on the main drive shaft, operated by the crank. The drive pulley of the conveyor belt is likewise on the main shaft. The agitators in the

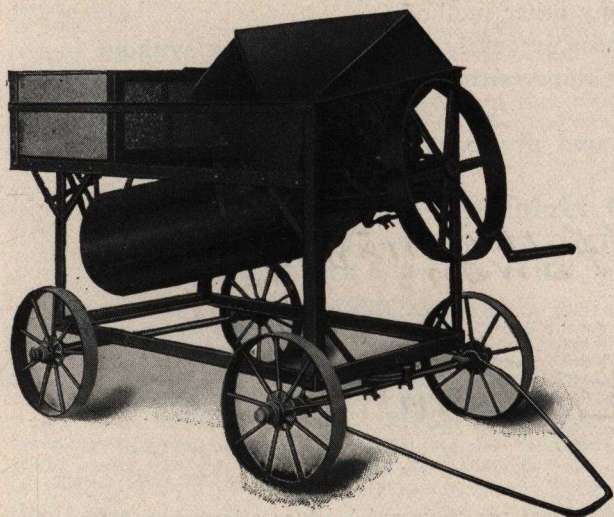
hoppers are driven by a slow moving sprocket chain. By simply belting to the hand wheel the hand machine can be driven by power and increase its capacity.

The Model B power machine is equipped with a Marvel Non-Heating gasoline engine, 2½ horse power, giving about double the capacity of hand power.

From the ground to the hoppers it is only 50 inches and the drum discharges directly into a wheelbarrow if desired. Easy to feed and handle the discharge. Running lengthwise of the inner wall of the drum are ribs of angle iron which carry the materials up and throw them over and over far more rapidly and thoroughly than possible with the shovel.

OPERATION

Our Little Giant mixer is designed for handling sand or bank gravel and cement or similar ingredients. It has two hoppers. Materials are fed to their respective hoppers and are drawn out through adjustable gates by a conveyor belt in conjunction with corkscrew agitators which force the materials toward the gates. Proportions are determined by the



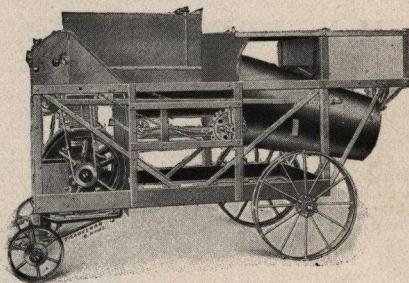
adjustment of the gates. The aggregate of materials is delivered in a uniform and constantly flowing stream to the upper end of the mixing drum. The proportions are positive because they are automatic. This mixer measures out the sand or gravel as accurately as the cement.

Just keep the hoppers filled and the machine does the rest.

The rotary action of the drum throws, rolls and tumbles the materials, one over the other, as they gradually pass two-thirds down the drum before any water is applied, which is then sprayed over the rotating mass, the volume being regulated by a valve, according to the consistency required. A perfect mixture results. A flange in

the lower end of the drum prevents the premature discharge of materials, thus keeping coarse and fine materials from being separated, on account of centrifugal force.

The mixing is continuous while the machine is in operation. All the concrete will be mixed the same length of time as it must travel the full length of the steel drum. You will see that the discharge end is much lower than the feed end. As a consequence, in this mixer the materials are always passing downward. Gravity helps to operate this machine. This is one reason why so little power is required to secure successful mixing with this machine.



CAPACITY

With one man turning and one man shoveling, about **THREE CUBIC YARDS AN HOUR** can be turned out. Here are some quotations from different users of our Little Giant.

- No. 1. Mixed 12 yards in two hours and fifteen minutes. It will mix as fast as two men can shovel with the material at their feet.
- No. 2. Have mixed as high as 40 yards per day. You have them all beat.
- No. 3. Have done \$15,000 worth of work with our machine. Put out 34 yards one day.
- No. 4. Have never found it lacking in quality of mix and accuracy of proportions.

PRICE

Model A, Hand Power **LITTLE GIANT**, shipping weight 700 pounds, F. O. B. factory, cash with order, net.....
Guaranteed for one year. Defective parts replaced free.

\$100.00

HELM PRESS OPERATORS MAKE BIG MONEY

They succeed where others fail.

They land the big contracts and the big contracts pay the biggest profits.

They put the old fashioned clay brick out of business.

They land "business" with the DRY WALL system not to be secured by any other method.

You cannot read these intensely interesting letters without being strikingly impressed with the possibilities of this business.

Every hamlet, town and city is a market place.

\$10,000 Brick in Ninety Days

\$2,430 Net Profit in Three Months. Two Clay Brick Plants Put Out of Business. All in a Town of 375 Population.

Gentlemen:

Minden City, Mich., Oct. 21, 1909.

Replying to your letter of recent date, I wish to say that the Helm Brick Press is O. K. I have turned out 810,000 brick in ninety days at the rate of **9,000 brick a day with five men and a mixer**. I had no breakdowns or trouble of any kind.

The demand for the cement brick is very large. Two clay brick yards that had been making brick for over twenty years shut down since I started making sand cement brick. The labor, cement and sand cost me \$4.00 per thousand brick. The brick sell for \$7.50, so they net me \$3.00 per thousand or \$27.00 per day.

I will send you photographs of my brick plant as soon as I can get them taken.

Yours truly,

Signed, FRANK OBEE.

In the above plant the labor cost per thousand brick was less than \$1.00. This is a record unequalled in any respect by any other hand machinery.

Mr. Obree made 837% on his brick machine investment in ninety days.

Helm PRESSED Brick are used in Important Buildings.

Gentlemen:

Sterling, Colo., 12-14-10.

The machine arrived in good shape and I will have it working tomorrow. I enclose a postal picture of the building I am working on. It will require about 900 M. backing brick and I have manufactured about one-third of them with two of your No. 8 Brick Presses.

My brick are costing \$7.00 per M. and are a much better brick than the usual burnt brick commonly used for backing and which would cost me \$12.00 on the job.

Your No. 8 Brick Machine is the best proposition that I know of and the brick I am making are as true in form and with as good edges as any press brick.

In addition to this schoolhouse I also have a \$25,000 Catholic Church contracted for and under construction and the backing brick for it have all been manufactured with a Helm Brick Machine.

Thanking you for your promptness in getting my last machine out, I am

Yours truly

NOEL HOGG,
Contractor and Builder.



Uncle Sam Endorses Cement Brick Made on the Helm Press

Uncle Sam is the most critical buyer and builder in the United States. He is the highest authority. When selecting brick he sends his inspectors out to select samples in the yards where the brick are made. These samples are sent to Washington and there put to severe tests. The brick made on the Helm Press meet his approval. They have been endorsed and used at Fort Bayard, N. M., for several seasons. Let Mr. Harlan, the contractor, tell you his experience in his own words.

A Single Contract for \$90,000

Fort Bayard, N. M., Mar. 17, 1909.

Gentlemen:

I landed \$90,000.00 worth of GOVERNMENT WORK yesterday, all HELM CEMENT BRICK CONSTRUCTION, these brick being specified. Will order another Helm Press as soon as I hear from approval of contracts at Washington. Please send the net cash price on another machine and pallets. Since buying your machine I have made all the brick I have used in my contract work and the machine makes a very good brick. We use a very coarse material, anything that will go through $\frac{1}{2}$ inch mesh screen being put into the brick and this suits the people at Washington. We sent samples of our brick to the authorities there and now the specifications call for cement brick altogether, so you will see we are making good brick.

Very truly yours,

Signed, J. A. HARLAN.

This is Mr. Harlan's Latest Letter

Fort Bayard, N. M., Oct. 15, 1909.

Dear Sirs:

Reporting on your Brick Machine which I purchased from you some two years ago. I have made only about 1,200,000 brick on this machine since purchasing as I only make brick for my own use; we make 7,000 per day with five men; could make 10,000 in eight hours easily had we better facilities for caring for them, but as our largest building has only a capacity for 250,000, it seems economy not to go to extra expense of building a plant that a man should have that made brickmaking an exclusive business.

We have from thirty to sixty days from time we receive a contract from the government before we are ready to lay brick and by having a hundred thousand on hand we can keep six or eight bricklayers busy and not catch up with the makers.

The breakage on the machine has been virtually nothing and what little there has been was entirely the fault of the operators; will say my machine has been operated altogether with Mexican labor. White labor should exceed the results at least twenty per cent. The machine today is practically as good as new; will also state all the brick we have made have been for government buildings; have samples selected by government inspectors and sent to Washington for tests, and cement brick are called for for all the work at this place; so we think the quality needs no further recommendation.

We use five to one. Sand is not good, much loam, but the quality is coarse which makes up for sediment.

We have never tried any other make of machine but if we were to buy another it would be a Helm.

Yours respectfully,

J. A. HARLAN.

N. B.—We enclose herewith photos of buildings completed, also those under construction, which have been built of brick made with a Helm Machine.

Another government contractor at Ft. Bayard bought a Helm Press and reports as follows:

Fort Bayard, N. M., Dec 14, 1910.

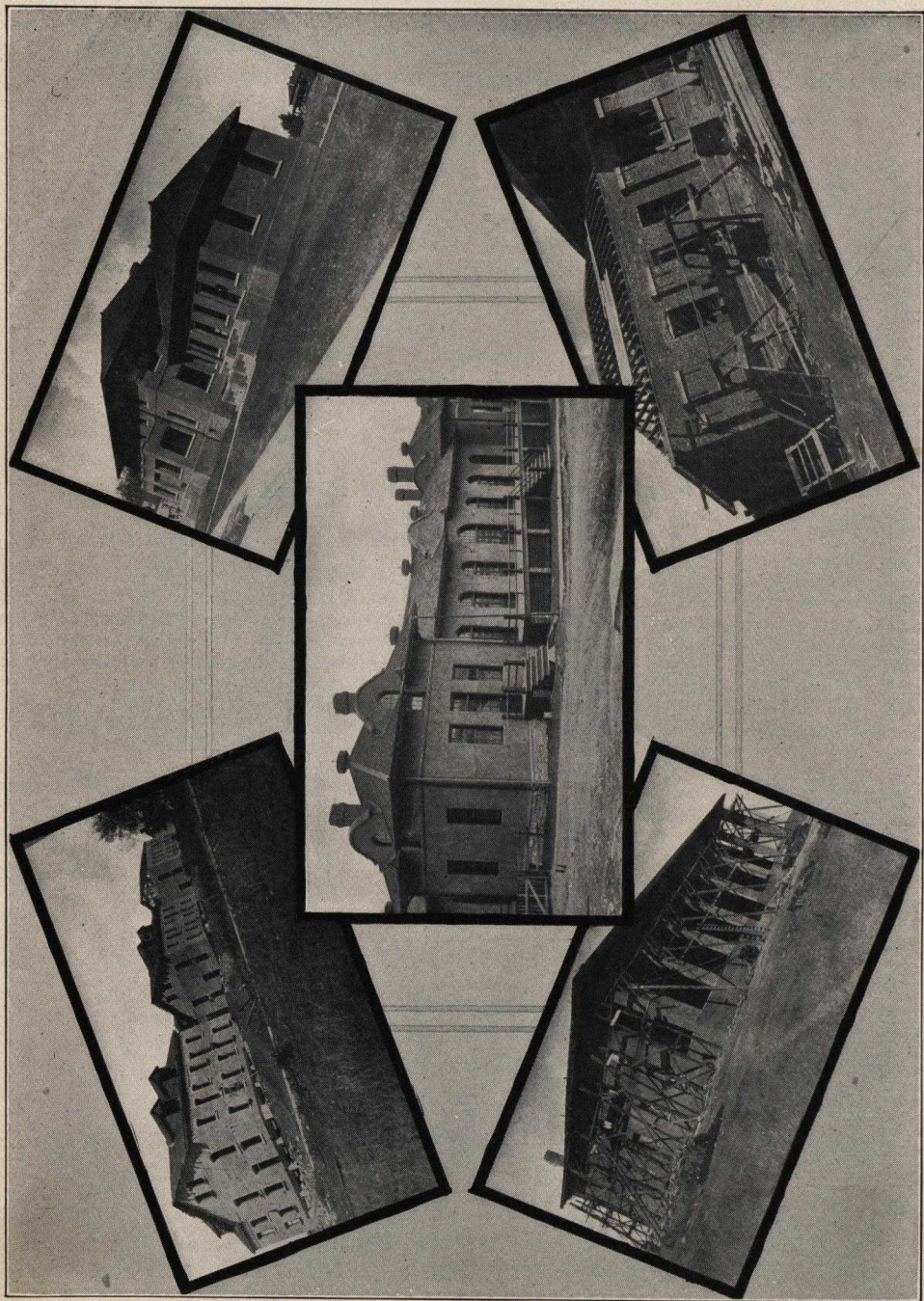
Gentlemen:

In answer to your inquiry I will state I have made nearly a million brick since July and the machine shows no wear. I think it is the best brick machine on the market and would suggest that others wishing a machine should give this a trial. It will talk for itself.

Very respectfully,

JOHN W. McQUADE.

**A Glimpse at Government Buildings at Fort Bayard, N. M.
Erected by Mr. Harlan, in which 1,200,000
Helm Press Brick were used**



More than a Million Brick and 50,000 Blocks is the Season's Output of the Helm in this Plant

Oacoma, S. D., Nov. 28, 1909.

Gentlemen:

As I have finished a very profitable season I deem it proper for me to let you know that I consider the "Helm" the best partner I have ever had.

We have made over one million brick and about 50,000 blocks, for which we find ready sale at good profitable prices.

During our run this season we had one breakdown which was caused by carelessness of a workman, but that was speedily repaired through your prompt shipment of the broken part.

We make a specialty of faced brick in colors which are rapidly displacing the clay products on account of strength, trueness, and uniformity.

We are about to form a company in C—, S. D., for the manufacture of fine pressed brick and you may rest assured that I, as general manager, will not consider the plant complete without a "Helm." So you see that you have one man who has been convinced that your press is the peer of them all.

I enclose a testimonial from H. D. Chamberlain, a gentleman for whom I have recently completed one of the finest residences in this part of the state.

Wishing you well deserved success, I remain

Your well wisher,

Signed, A. W. BARKER, Mgr.
Barker Impr. Co.

Chamberlain, S. D., Nov. 26, 1909.

Gentlemen:

I desire to state that Mr. A. W. Barker, of the Barker Improvement Co., of Oacoma, S. D., has just completed a house for me in which he used the brick made on your press. I consider these bricks superior to clay pressed brick as they are all select. I expect to have some pictures soon and will gladly send you one so you can see how anyone can save money by patronizing the Helm.

Respectfully,

Signed, H. D. CHAMBERLAIN.

Another Interesting Letter from Mr. Barker

Oacoma, S. D., 2-12-'10.

Gentlemen:

I received a letter from the Helm Brick Machine Co., asking if I would give you a little information concerning the cost of brick and blocks and of laying the same.

1st. Cement brick made on the Helm can be laid more rapidly by a good bricklayer than common clay bricks as they are uniform in size, true corners and don't set the mortar so quickly. The usual cost to lay these brick is \$3.50 per thousand, including the tender.

My method which is receiving lots of praise, is to use brick for the outside walls and blocks for inside walls tied with galvanized ties. This wall is ABSOLUTELY DAMP PROOF and we plaster on the walls. I built a house for H. D. Chamberlain, in Chamberlain, in this manner and it is an established proof that no better building can be put up.

I HAVE USED A HELM FOR THREE YEARS AND NO TAMP BRICK OR BLOCKS CAN COMPETE WITH ME AS I CAN MAKE BETTER BLOCKS OR BRICK AT A REDUCED COST.

COST OF MANUFACTURE, ETC.

These are figures which are correct so far as cost of manufacture goes.

Sand costs 50 cents per yard, or.....	\$.65 for 1,000 brick
Cement \$2.00 a barrel.....	4.50 " " "
Labor at 25 cents per hour.....	2.00 " " "
Carrying brick from shed.....	.50 " " "

Total cost..... 7.65

I sell these brick at..... 12.00

Profit \$ 4.35

With four men we make 8,000 brick or 800 blocks per day.

I sell plain face blocks at 12½ cents and rock face at 15 cents each.

For blocks faced 2 parts sand and 1 part cement I charge 50 per cent more, \$18.00 for faced brick and \$20.00 for ornamental brick.

The price for laying the blocks is 4 cents each with tender included, and a mason that can lay 3,000 brick can lay 300 blocks, equal to 3,300 brick. Mortar for brick: one yard of sand and one barrel of lime to 1,000. Same amount of mortar will lay 600 blocks; equal to 6,600 brick.

In figuring walls always figure brick measure and allow \$3.00 per M. for mortar at \$1.00 a yard for sand and \$2.00 a barrel for lime. Blocks: 50 cents for mortar per 100 blocks.

The Helm Press makes a denser block or brick than tamping and 50 per cent stronger. I use a Helm and have 2,000 pallets or enough for 10,000 brick. I use a power mixer and this season I shall use a 5 horse power gasoline engine to elevate sand and cement into the mixer and then elevate concrete ready to put in moulds, thus saving one man's work. I have two offbearing trucks and every other day two men unload brick or block from racks and pile them in yard. In the meantime I use the other two men to make sills, caps, coping or ornamental work.

Respectfully,

Signed, A. W. BARKER.

NOTE—April 8th he advised as follows: "I must turn out a million brick by August 1st. Have contracts for over \$100,000 worth of work now so you see I must be hustling and that HELM PRESS PRODUCTS ARE RIGHT."

THERE IS SUCH A PROFIT BEARING OPPORTUNITY IN EVERY LOCALITY FOR SOME ONE WITH A HELM PRESS—WILL YOU BE THE ONE?

An Interesting Letter from a man who traveled 1,500 miles to see the Helm Press before buying.

Why did he make this trip?

He had used five different makes of machines for various forms of blocks, including a big, expensive power machine. He sold all these machines and made this long journey to see the Helm Press. Read what he has to say.

Gentlemen:

Olathe, Kans., Oct. 25, 1909.

I bought a Helm combination brick and block press from you in February, 1909. It came set up to make brick but I changed it to blocks as I specially wanted the press to make two-piece blocks. I got just what I wanted. I have had all the work I could take care of and that is all anyone could ask.

I have used a number of other makes of machines but when it comes to speed the Helm Press beats them all. As for quality, if you do not get it on the Helm Press it is the fault of the workman. It is the best machine that I have used. If you have the right kind of men you can make up all the blocks in one day that you can find room for in a shop 30 x 50 feet, as I have done that several days with three men. The machine is always ready.

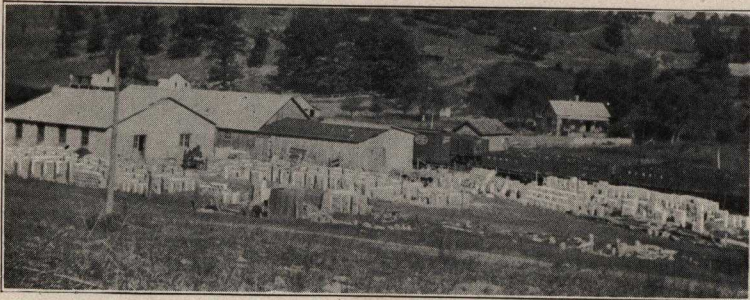
We face all our blocks. We made 42 in 24 minutes. Wherever my blocks go the people all notice them. They make very pretty cellar walls, and always meet the approval of the women. Just to show that they are popular, I have in one square three cement jobs, one for \$500, one for \$700 and another for \$925.

I have worked exclusively with blocks this season but as soon as I can take the men from our contracts I will put up another building 30 x 50 feet and make brick this winter. Could take a contract this week for 45,000 brick if I had them.

Yours truly,

GEO. ABBOTT.

This is what Mr. Crick Told a Prospective Purchaser About His Machine



View of Mr. Crick's Plant

Dear Sir:

Tracy City, Tenn., July 29, 1909.

Answering yours of 7-19-'09, I have a Helm Press One Man Machine. The machine is all right. It makes as fine brick as can be made, every one a brick. The machine is easy to operate and built stout. It has a capacity of 5,000 for four men, or 1,200 for one man. My brick cost from \$4.00 to \$6.00 a thousand and I sell them for \$10.00 per thousand. I have put the red clay brick out of business here. You can make any kind of brick on the Helm Press. Don't buy a hand tamp machine or flap jack, for your brick will split. If you are going in the brick business buy a Helm Press for I have given it a hard test. I have made money with my brick business. I sell more brick than I do blocks. I have been in the brick business for nineteen years and in the concrete for three years.

Hoping this is the information you want, I am

Yours truly,

SILICA ROOFING & CONSTRUCTION CO.,

R. M. CRICK, Manager

Beats Hollow Blocks with Pressed Brick

Dear Sir:

Lindsay, Cal., Aug. 2, 1909.

I purchased a No. 8 press a couple of months ago and have given it a fair test. I am more than pleased to state that it fulfills every promise made for it. In fact, its capacity exceeds their estimate. I find the product a perfect brick, uniform in size and having a clear ring, showing a marked degree of hardness.

These qualities are impossible to obtain in a tamp machine of any description. I am compelled in this locality to compete with cement blocks made by tamp system and even in the short time I have been in business the superior quality of my brick has helped me beat the block for several good jobs.

Yours truly,

G. COSBY.

Helm Press Brick Approved by Best Architects

The Redding Architect Company of Boulder, Colo., is one of the leaders in their field in the west. The firm has specialized on school buildings. When they wrote us concerning their experience with Helm Press brick they had three large school buildings under construction. They prepared the plans for the Eaton, Colo., High School, a \$25,000 structure in which Helm Press brick were used.

Architects are the highest building authorities. Read what the architects think about the Helm Press brick.

Gentlemen:

Boulder, Colo., Nov. 27th, 1909.

In reply to your inquiry in reference to the cement brick used on the Eaton High School, made with your cement brick presses, will state that they were highly satisfactory in every particular, the face brick being uniform in size, uniform in color and with perfect sharp edges, and the fact that they can be made on the ground eliminates the danger of breaking the edges of brick, which often occurs on pressed brick, which must be loaded and unloaded on the cars. The backing up brick being made of rather coarse sand, we find the mortar adheres much better to the cement brick than to a smooth burned brick after the mortar had set.

We were so much pleased with the cement brick made on your press that we have specified them in a \$35,000 School Building at Salida, Colo., being thoroughly satisfied that they are equal to any brick made, and the price much less than where brick would have to be shipped in. Expect to use cement brick in the future where the same are available.

Yours respectfully,

Signed, THE REDDING ARCHITECT CO.,

Wm. Redding & Son.

Gentlemen:

Bellmont, Ill., 9-14-'10.

Sorry that I haven't answered your letter of 7-19-10, but I'll tell you I have too many irons in the fire at one time. When I started in the concrete business last spring I thought it would take some time to introduce the brick and blocks made on your machine but soon found that I was wrong. I have more orders for brick and blocks right now than I can fill this fall and I am also making drain tile and getting behind with orders, in fact I am rushed and haven't hardly got time to turn around.

I don't think you can say anything too good about your press. One of our contractors here in this town said that he never saw a more perfect block and he has used hundreds of different kinds made on different machines. It cost me less than \$5.00 per thousand to make brick and they go like hot cakes at \$10.00. Haven't got a hundred brick on the yard at this writing. They won't hardly give them time to dry.

Yours very truly,

E. H. HILGEMAN.

Gentlemen:

La Crosse, Kans., 3-18-'11.

I am well satisfied with my Helm machine I bought of you and have done more work per hour than you said could be made on the machine. Have made 144 blocks per hour as a test. The machine is good enough for anyone and the hollow wall is the **only system** for cement buildings. I send you a card with photo of I. O. O. F. Hall, 50 x 81 feet, two stories and basement, hollow wall system, 33,000 blocks and 26,000 brick. The building is built at Utica, Kans. Anyone not believing my statement can write No. 404 I. O. O. F., Utica, Kans., and be sure.

Yours truly,

JOHN BUTLER.

Lumber Dealers Recognize Concrete Possibilities

This lumber firm enjoying a nice business in lumber, lath, shingles, and interior wood work in which they have made money, now adds concrete to its line. This is what they have to say about the Helm Press which they bought after sending their manager to see various machines and finally to see the Helm Press.



An Interesting Letter—Read It

Greenville, Mich., March 28, 1910.

Gentlemen:

Recently we received a letter from you asking our experience and opinion of the Helm Brick Press and Power Attachment.

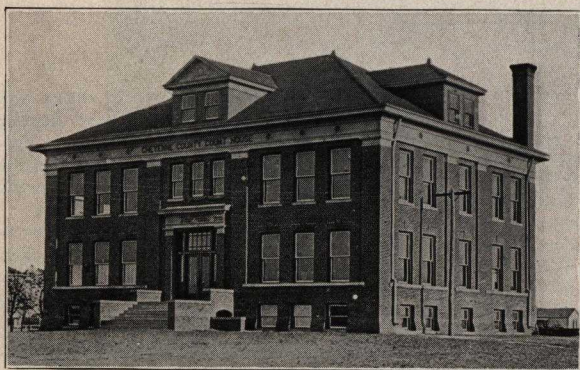
We have used the press with hand power for about a year with good results; so much so that we hesitated about putting in the power attachment. About the first of the month we put in the power attachment and from the start it has worked perfectly. On a trial of three five minute tricks we made 600 perfect brick. Since then we have put in an elevator for the concrete and we can make more brick than we can take care of with our dry kiln capacity. We have three divisions in our kiln, 40 feet each in length, for four cars each. Had we dry kiln capacity we could easily turn out 15,000 brick daily with four men.

The press is all right with hand power and with the power attachment driven with a five horse power motor or a gasoline engine the output will be more than doubled.

Yours very truly,

J. W. BELKNAP & SON.

\$300 Net Profit in 25 Days with the One Man Press \$12 Net Daily Profit with a Crew of Two Men and a Boy



Rutledge, Mo., Oct. 16, 1909.

Gentlemen:

We will now give you a statement of our cement brick business. We have had a nice business and could have secured more orders if we had been able to put in your large machine. The people who have bought our pressed cement brick are more than pleased and we want to say that we have made a nice piece of money with our little machine. We would advise anyone going into the cement brick business to buy the Helm Press for we are willing to put your machine against the world for making cement brick.

Our 5-brick press went into service on July 22d, operated by two men and a boy. This crew made \$12 a day clear money for us. 25 days work netted us \$300.

Your machine has enabled us to secure more contracts than we could have gotten in any other way. We are brick masons by trade and wish to say that these brick lay better than any other kind we ever saw because they are all the same size, true and uniform.

Recently a tamp machine owner called on us and held the watch while one of us took the mixed concrete and made 125 perfect brick in twelve minutes. We made him sick of his bargain before he left our camp.

In our business transaction with you your treatment of us has been such we want to urge those who may think of going into the brick business to buy of the Helm people for they will get a square deal and will be on the right road to success in the cement business. Our business has been so satisfactory that we will increase our capacity for the coming season and it goes without saying that we will buy another Helm Press.

Yours truly,

KINTNER BROTHERS.

What Practical Builders Think of the Dry Wall System

Gentlemen:

Cambridge, Ohio, 1-30-'11.

In reply to your recent inquiry as to how we like the Helm brick machine, wish to say that we don't hesitate to pronounce it the **best** machine on the market at the price for brick and block. Of all the tamping machines for brick and block that we have inspected it is far ahead in point of turning out the work in a thorough and rapid manner. And every brick layer and mason that have used our product say for true brick and blocks it is far ahead of any other machine-made brick and blocks they ever used. The brick and block made on the Helm Press are all anyone could wish for and we invite anyone interested in this line to visit our plant and see the machine in operation.

We have just installed a power mixer and our output will be doubled as hand mixing is slow and hard work, besides it consumes too much time.

In regard to two-piece blocks will say we had some opposition from some of the contractors because they had used solid block before and had some doubt as to the two-piece block but it only took one job to convince them that the two-piece block was the block to use and one of our hardest contractors to convince would not use any other kind now. We think there is a great future for the two-piece block here as the people are realizing that it is possible to build a dry concrete house of two-piece blocks, something impossible with the solid block unless veneered on the inside which process increased the cost of building to such an extent that there were very few concrete houses built.

I am sorry that I haven't any more photos to send you at this time. The one I am enclosing is one taken from our first output from the Helm machine after we installed it. The party that built it was so anxious to use the two-piece block that some of the block were less than a week old when they were laid in the wall, something that would be impossible with a solid tamping block and goes to show that the Helm Press makes a more dense block and cures out quicker than any other.

I don't know anything further I could say in regard to the press except that we would not think of being in the brick and block business without a Helm Press. You can refer any and all inquiries to us and we will take pleasure in demonstrating the press to anyone at any time they care to visit us.

Trusting this is satisfactory and wishing you the success your machine deserves, we are

Yours respectfully

THE DUFFEY CONSTRUCTION CO.,

Per Chas. T. Duffey, Secy.

This is the Way the DRY WALL Blocks and PRESSED Brick are Selling

Gentlemen:

Monticello, Ark., 12-20-'10.

As we have never written you as to how our business is progressing, we wish to say we consider we are doing pretty fair. We have had the press (Model 5 brick and block press) going at full capacity since installing it and have sold everything we have made, in fact, they haul it off before it gets hard enough to handle. We have never been able to get anything ahead. We expect to do some more business with you as soon as winter is over.

Yours truly,

OGLESBY BROS. & BAILEY.

There is Big Money in Contracting, but Contractors Buy the Helm Press to Make More Money

Gentlemen:

Yuma, Colo., Nov. 1st, 1909.

Regarding the Helm Brick Machine No. 8 which I bought through the Cement Machinery Supply Co., of Denver, Colo., last spring, I wish to say that the machine has proven to be just as represented and has given entire satisfaction. I have built a number of buildings of the brick. Two men manufacture from 2,500 to 3,000 a day. I have used other machines but none as good as the Helm Press. I intend to install another in the spring in order to take care of the business.

Yours truly,

Signed, P. E. CONERY,

Contractor and Builder.

Opinions that Carry Weight

Most anyone can express an opinion but the opinion that carries weight comes from the man of experience who investigates carefully and thoroughly knows the subject he is talking about. These letters come from **men of experience**. For example the following letters came from Mr. Lee Stover of Watertown, S. D. He is president of the Stover Construction Company.

Mr. Stover was once or twice honored as the president of the North Western Cement Users Association. He has built up a business known throughout his state and farther. He makes the cement business a continual study but he has always remained a steadfast friend of the Helm Press.

After using the Helm Press for One Year Mr. Stover Says

Watertown, S. D., March 14, 1906.

Gentlemen:

We have used the Helm Brick Machine now for about a year. It has not cost us a cent for repairs and is today just as good and just as perfect as the day we got it. We have made a good many hundred thousand brick and have found a ready market for all of them. Any customer who has any business intelligence whatever will readily pay several dollars a thousand more for sand cement brick made with the Helm Brick Machine than they will for any clay brick or any of the sand cement bricks made with those so-called hand tamp machines.

The principal advantages that we see in the Helm Brick Machine over any other hand machine brick that we have seen, are the following:

1st. More brick per man per day can be made than with any other hand brick machine.

2d. A less proportion of cement can be used and obtain good results because of the tremendous pressure put upon the mixture which excludes all air, forces the matter into a compact mass and produces a denser and better brick.

3d. More moisture can be used in the mixture than can possibly be used in any of the hand tamp machines and so produces a vastly superior brick to a machine where the mixture can be simply dampened.

4th. The machine is simple and there seems to be nothing that can get out of order, nothing to clog or stick, no constant expense for repairs.

5th. The uniformity of the product produced is remarkable. No hand tamp brick machine can possibly be operated by any man or set of men so that the tamping will be uniform. Men grow tired and the tamping is not the same. Even the slightest lessening of the pressure on the brick results in light, porous brick that are worthless for any purpose. The operation of the Helm machine in applying pressure is perfect. The pressure is and must be the same on every brick.

6th. The proposition of facing brick in the Helm machine is simplicity itself. The face is applied quickly and easily and it comes where you want it and under the heavy pressure it sets where you put it.

7th. The price is right. Any mechanic looking the machine over will say that it is sold at a fair and reasonable price, and any man using the machine will say that it is made right, made to use and not made to sell as are a great many so called cement working machines.

Yours very truly,

(Signed) LEE STOVER.

Three years later Mr. Stover wrote this Letter to a Skeptical Prospective Purchaser

This letter came to our attention when the party receiving it called at our factory and brought it along with others he had received from Helm Press users he had corresponded with.

Watertown, S. D., April 6, 1909.

Gentlemen:

Replying yours of the 3rd we use a Helm hand press brick machine, I think their office is Traverse City, Mich. We have tried the hand tamp machines and absolutely gave them away. I would not let a man give me brick that were made on any tamp machine I ever saw. I have watched the big power brick press work, and I can make brick with the hand power press for less money and as the machine gives 80,000 lbs., I can see no difference in the brick made with the hand press and one made with the power press; of course the power machine gives more pressure but the stuff will not squeeze only so much any way and the power press people do not use a bit more material than we do to make a thousand, so I take it our press gives the concrete all the squeeze it will take so it simply is a question of cost.

Now I am not at all interested in that press, have only the natural prejudice that we all have for a machine that gives us the service we expected when we bought it and I

am sorry to report I have put good money into a——lot of so called cement working machinery that was made to sell and not to use at all.

We use five men when we are running the brick machine, one man on each lever, one man filling pans and two men off bearing from the press to the curing kilns. Two big boys would do just as well for the latter, if you could get boys that did not step on themselves as the off bearers have light work but the speed entirely depends on how fast you can get the stuff away from the press, so we have quit fooling and use quick active young men and find it pays better.

The five men make 10,000 brick in ten hours and do it easy. I have seen them get to racing and a number of times they have run 1,500 in a single hour, but we do not expect more than the 10,000, and if they make that in 9 to 9½ hours, as they frequently do, we give them 10 hours pay and call it a day. I think 10,000 is enough where you run day after day. The work is not so hard but it is powerful steady. You do not need to furnish any hammocks for them while they are making brick but after it is three or four years, I forget which, running the press and after trouble with our men, if we did not be perfectly fair and let all of them have their turn in making brick, I have decided that the machine is the easiest job about the plant. We have our share of "soldiers" in so many men and they would not want to work on the press, if it was the hardest work and we had considerable bad feeling because we would not let men shift onto the press when we are making other goods and wanted them on the other work. One beauty about the machine is that the only expense it has made us has been for new wood handles on the levers. The boys get to racing to see what they can do in so many minutes and the lever men will get clear out on the ends of the levers and we have broken three handles in that time. That is the lightest breakage account we have ever have had on any piece of machinery around the plant and there is no excuse for that except plain——foolishness. The machine is just as good today and does just as good work as the day I got it. In this estimate I take no account of mixing your concrete, you know what that costs you, nor do I make an estimate of cost of taking brick from the kilns and stacking in the yard. It depends so much on your facilities that it is impossible to tell.

The machine runs from 1,000 to 1,400 pounds over the guaranteed pressure and goodness knows that is enough. It just makes the water come out of half dry concrete when the press comes down. I never saw or heard of a hand machine that I would have except the Helm press, nor a power press that could compete with it.

We have no trouble selling the goods, can get more for them than kiln run brick, use nothing else here for chimneys, cisterns and veneer work. Made right they are good sellers.

Yours truly,

Signed, STOVER CONSTRUCTION CO.,

By Lee Stover, President.

Our last letter from Mr. Stover was dated Oct. 23, 1909 and this is what he says:

"WE ARE RUSHED TO DEATH WITH WORK"

Helm Press Brick are Best by Test

Way out in Honolulu the Helm Press is in daily operation. The operators, the Honolulu Brick & Stone Co., had some of their brick tested by Jas. L. Young, a civil and consulting engineer for the United States government.

HERE IS THIS U. S. ENGINEER'S REPORT

Note: Average for five brick. (Taken from stock.)

Actual dimensions— $3\frac{3}{8} \times 8 \times 2\frac{1}{4}$; flat area, 31 square inches.

Weight— $5\frac{1}{4}$ pounds; texture, coarse grained.

Constituents—1 part Alsen cement, 2 parts sand, 4 parts rock sand which passed a screen of $\frac{1}{4}$ " mesh.

Age when tested, 27 days.

(Note—But 1 part cement to six of aggregate.) Initial failure at 75,000 pounds, equal to 2,419 pounds per square inch. Maximum load was 85,000 pounds, equal to 2,742 pounds per square inch. These brick absorbed 8% in 48 hours, while a red clay face brick took 12%, in other words 50% more water was absorbed by the pressed clay brick.

As it took 85,000 pounds compression to crush a brick, it would take 16,200 of these Helm Press brick piled one above another to secure enough weight to crush the bottom brick. This would make a column more than 3,000 feet or more than half a mile high.

An Interesting Letter About Dry Wall Blocks.

Gentlemen:

Oneida, N. Y., 2-1-'11.

Some time ago I received a letter from you inquiring as to the cost of brick and blocks made with your combination No. 5 machine. I have been so busy that I have just found time to answer you.

First, I would like to say that there are several makers of hand tamped hollow blocks in this city, but it is easy for me to compete with them, because I can manufacture cheaper besides giving a better product. My blocks and brick made on your machine have absolutely true and square corners and edges, and are denser, stronger and better looking than any blocks and brick I ever saw. I was in New York City last month attending the cement show and it certainly gave me great pleasure to discover that I had the best machine for blocks and brick.

As to cost of manufacture of blocks and brick on your machine, will say that I only have three men working for me and they turn out 600 blocks per day of 10 hours. They do their own mixing, pressing, and taking care of the product after pressing. I pay them good wages but find that it more than repays me in the end. The cost per 100 blocks is as follows:

2 bbls. cement @ \$1.10 net.....	\$2.20
1¼ yds. bank gravel @ 80 cents.....	1.00
Labor @ 25 cents per hour.....	1.25
Yarding55
Total cost 100 blocks.....	\$5.00
Cost per block05

The cost of laying these blocks I figure at not over 4 cents per block. This makes the cost to me per sq. ft. of wall about 13½ cents. I get 25 to 30 cents per sq. ft. according to kind of wall.

I think my output could be more than doubled by doubling my force of men because now the press isn't running all the time, namely, when the crew is mixing concrete or yarding. One of the good points of a Helm Press is that you can operate it just as economically with three men as with 7 or 8 men.

I find that 3 men working all the time just about supplies the demand here, but if there should be an unusual demand, all I would have to do to meet it would be to put on a few more men and I could double or treble my output.

I have about 4,000 pallets (2 ft. long) and curing sheds large enough for a week's output, so that I do not have to disturb the blocks after setting away in the curing room for a whole week. This allows me to keep blocks thoroughly sprinkled and to allow them to become hard before piling in yard. My plant is always open to visitors and I would take delight in showing interested parties how 'tis done.

Yours very truly,

J. B. DRAKE.

About Pressed Cement Brick

Gentlemen:

Holyoke, Colo., Dec. 15th, 1910.

In reply to your request of recent date, I will say that I have used a No. 8 Helm Press for three years. This year I have made brick for the Holyoke Inv. Co. block, the King building, and Holyoke Auto Co. garage, besides keeping brick in stock for retail trade.

I don't feel hardly safe in telling the capacity I have developed with the machine as it is so far above the advertised capacity. We have done in 20 consecutive days an average of 7,000 brick and in one day 8,060, and in one hour 1,310 brick.

As to quality, the brick were passed upon by the architect as being all O. K. Samples taken at random from the piles were sent to the City Engineer of Denver, Colo., and pronounced by him as being perfectly safe for any building of the usual brick design. I haven't the data sheet, so I cannot give you the various tests.

I use a power mixer and a crew of 6 men, and pallets for about 10,000 brick. Two men wheel out brick and keep them wet while one operates the mixer and one operates the machine, while two fill the machine and offbear alternate pallets. I use two bbls. of cement per thousand brick and call the mixture 5 to 1, and 1½ yards of sand and gravel. I sell the brick in quantities at \$10.25 per M.

Respectfully yours,

ED. HETHCOTE.

YOU ARE LOSING REAL MONEY

Every day you are without a Helm Press. If ultimately you intend to go into the concrete business or even if you are now in the concrete business, a day's delay costs you that day's manufacturing profit, which is \$10 to \$50.

THIS IS OUR ORDER PLAN.

REMEMBER you are fully protected. Our guarantee on page 2 of the cover shows how careful we are of your interests. Your interests and ours are the same. If you are satisfied you will advertise our business. Hence we make it our business to see that each purchaser is satisfied. Our interest in our customers does not cease when the sale is made. We protect them and help them in every way within our power. We give cheerfully and FREE to our customers the benefit of our knowledge of the concrete industry gained by many years of experience.

USE THE ENCLOSED ORDER BLANK which is prepared for your convenience, making out your order according to either of the plans here suggested.

CASH WITH ORDER PLAN No. 1. If you order by this plan you can deduct 5 per cent cash discount from the prices in the catalog providing the cash accompanies the order. You assume no risk in doing this and you are fully protected by our 365 days guarantee.

EXAMINATION PLAN No. 2. Not subject to 5% cash discount. You may send 10 per cent with your order and place the balance on deposit in any bank you choose, sending us the signed certificate attached to enclosed order blank. The bank will hold the deposit until the machinery is delivered, when it is to be forwarded to us. This gives you the opportunity of examining the machinery before the money is placed in our hands.

About the People You Do Business With



Bank Building

A. Tracy, Lays, President

R. Boyd, Clerk, Vice President

Samuel, Treasurer

A. J. Hayward, Assistant Cashier

A. J. Hayward, Assistant Cashier

Traverse City State Bank.

Capital \$200,000 Surplus \$75,000

*Established 1886
Incorporated 1892*

Traverse City, Mich. Nov. 29th, 1909.

To whom it may concern:

Our opinion as to the methods and reliability of the Helm Brick Machine Company is such that we can commend them without reserve.

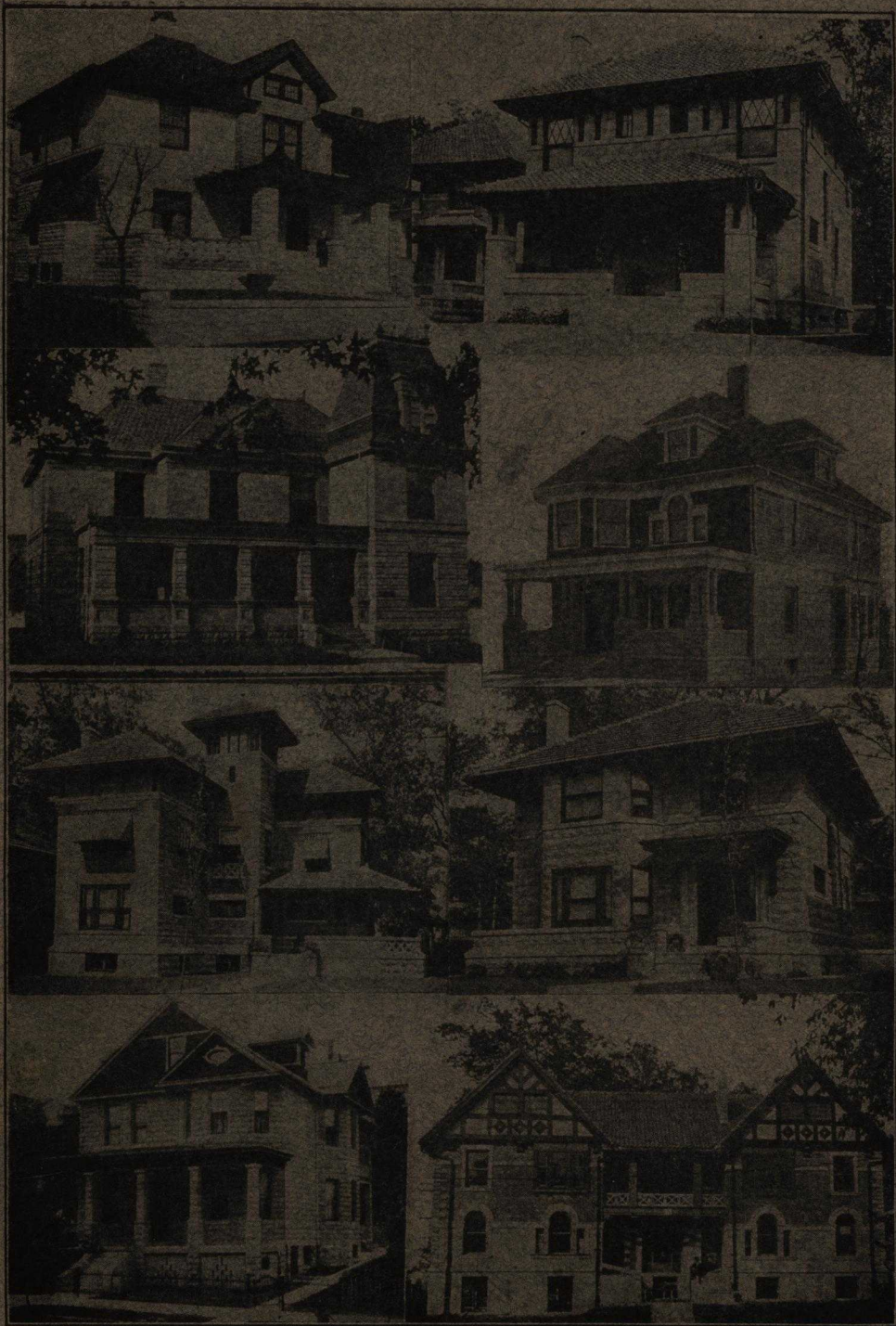
The officers of the company are favorably known to us and command our confidence. We believe them to be honorable business men and in our judgment customers dealing with the company can feel perfectly secure in relying on its honesty and fairness.

Very truly yours,

Samuel Hayward
Cashier.

Address

Helm Brick Machine Company
Traverse City, Michigan



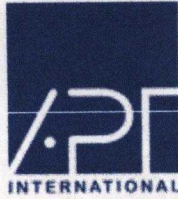
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They make home owners satisfied and the builders are on the road to prosperity

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